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THE INTERRELATIONSHIP BETWEEN SOCIAL SUPPORT, RISK-LEVEL AND SAFETY INTERVENTIONS FOLLOWING ACUTE ASSESSMENT OF SUICIDAL ADOLESCENTS

A thesis presented in partial fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY IN SOCIAL POLICY AND SOCIAL WORK

AT MASSEY UNIVERSITY, PALMERSTON NORTH, NEW ZEALAND

DEBORAH ANNE SMITH

2001
ABSTRACT

This project was undertaken largely to address (a) the concern that New Zealand has one of the highest rates of youth suicide in the world, and (b) the limited empirical research available on crisis assessment and intervention for suicidal adolescents in New Zealand. Research on youth suicide has primarily focused upon examining factors which place youth at-risk for suicidal behaviour. Social support was chosen as a variable of interest in this study due to (a) its importance in fostering healthy adolescent development, and (b) its identification as an important factor in increasing risk of suicide, particularly if it is lacking or of a negative nature.

The present investigation tested a model comprising three constructs: social support (i.e., negative and positive), assessed risk-level of suicide, and safety interventions (e.g., hospitalisation, respite care). Two studies were conducted: an archival study and a vignette study. For the archival study, a record review was conducted using acute assessment reports from the Child, Adolescent and Family Service (CAFS). Data from 50 attempter files and 50 ideator files were collected in order to establish reliable measures for the vignette study. The vignette study involved administering a vignette-style questionnaire to 23 CAFS clinicians.

With the exception of the Children’s Global Assessment Scale (CGAS) scores in the attempter group, the interrater reliability was good on all indices for the archival study. The vignette study indicated adequate reliability for risk-level ratings based on the multi-rater kappa. The archival study demonstrated that there were significant
interactions between group and risk-level (recoded), group and negative support severity (recoded), group and positive support, and negative support severity and total safety interventions (recoded). The vignette study revealed significant interactions between negative support severity (without or with positive support) and assessed risk-level, negative support severity (without or with positive support) and total safety interventions (recoded), and assessed risk-level and total safety interventions (recoded). Overall, results from this study indicated that: (a) the greater the level of negative support severity, the higher the risk-level; (b) the greater the risk-level, the greater the number of safety interventions implemented; (c) the presence of positive support, in addition to negative support, appeared to result in lower risk-level assessments, and (d) certain risk-levels were indicative of particular safety interventions. Revisions to the social support model were necessary based on the results obtained.

For the vignette study, clinicians' responses with respect to the decision-making process for risk-level and safety interventions were also explored using the principles from a grounded theory approach and inductive content analysis. The results indicated that clinicians use a methodical process when assessing risk-level and making safety intervention recommendations. Process models for assessing risk-level and recommending safety interventions are presented in relation to these findings.

This study makes several important contributions to the research on youth suicide by: (a) providing evidence for reliable social support concepts – namely, that of negative
support, positive support and negative support severity, (b) assessing the relationship that both negative and positive support have with suicide risk-level, (c) examining the relationship between risk-level assessment and specific individual safety recommendations (other than hospitalisation), and (d) providing evidence of a relationship between negative support severity and recommended safety interventions, not previously tested.

The implications of these results are discussed in terms of their application to (a) youth suicide treatment and prevention, (b) current or proposed services and procedures for at-risk youth, and (c) future research.
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Deborah Anne Smith

May, 2001
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CHAPTER 1
INTRODUCTION AND OVERVIEW

1.1 Overview of Youth Suicide Research and Justification for Present Study

The primary intention of this chapter is to outline the background and justification for the present research project. The following areas will be discussed: (a) statistics on youth suicide in New Zealand, (b) the need for the examination of the assessment and intervention process for suicidal youth, (c) empirical and theoretical research on social support and suicide, (d) New Zealand youth suicide government guidelines, and (e) professional and personal experiences. The second section within this first chapter provides an outline of the structure of the entire thesis and a brief synopsis of the material contained within each chapter.

1.1.1 Statistics on Youth Suicide in New Zealand

Recently, there have been concerns expressed in relation to the issue of adolescent suicide. Provisional data indicate that in comparison with selected OECD countries (e.g., Finland, Australia, Canada, USA, Norway, France, Sweden, Germany, Japan, UK and Netherlands), New Zealand’s 1998 youth suicide rate still appears to be highest. The increase in youth suicide appears to be a global trend, particularly amongst developed countries (New Zealand Ministry of Health, 2000).

Prior to presenting the available statistics on youth suicide in New Zealand, it is essential to first identify some of the problems inherent in the collection of these
statistics. There appears to be a general consensus that suicide statistics underestimate the true rate of suicide (Hawton, 1986). Several explanations have been put forth to help explain why discrepancies exist. For example, the criteria necessary to make a decision that someone has died by suicide may be too narrow and may vary between different countries (Hawton, 1986). It is also possible that the key professionals who make the verdict of suicide may differ depending upon the country (e.g., medical officers in the United States; coroners in England and Wales). Finally, the willingness to classify a death as a suicide may also be influenced by prevailing religious beliefs and/or a desire to protect family members (Hawton, 1986). All of these factors need to be considered and kept in mind when evaluating the following statistics on suicide. These previous explanations demonstrate that it is very likely suicide statistics underestimate the true rate of suicide (Hawton, 1986).

Recent provisional statistics released by the New Zealand Ministry of Health (2000) indicate that in New Zealand 138 people aged 15-24 years (defined here as the age span for “youth suicide”) committed suicide in 1998. Of these, 103 were male and 35 were female. In 1989, the male rate of youth suicide was 37.9 per 100,000 compared with 37.8 per 100,000 in 1998. In 1989, the female rate of youth suicide was 7.0 per 100,000 compared with 13.3 per 100,000 in 1998. In 1989, the total rate of youth suicide was 22.6 per 100,000 compared with 25.7 per 100,000 in 1998 (New Zealand Ministry of Health, 2000).
In 1998, 42 Maori youths aged 15-24 died by suicide compared to 96 non-Maori.¹ There were 13 Maori female and 29 Maori male deaths, compared with 22 non-Maori female and 74 non-Maori male deaths. The rate of Maori youth suicide in 1998 (39.4 per 100,000) was higher than the corresponding non-Maori rate (22.3 per 100,000).

Prior to 1995, the non-Maori rate was generally higher than the Maori rate. This reversal in trend is thought to be mainly due to ethnicity coding changes implemented in 1995. In September 1995, the methods used for recording ethnicity changed from a system of biological concept (50% or more ancestry) to one of self-identification. This change was initiated in order to coincide with census changes and is seen as a more reliable method of collecting ethnicity data (New Zealand Ministry of Health, 2000).

With respect to gender, the male suicide completion rates in New Zealand seem to be consistently higher over time than the female rates (New Zealand Ministry of Health, 2000). Internationally, males are more likely to be victims of suicide, while attempted suicides are more likely to occur among females (Brent, Perper, Moritz, Allman, Friend, Roth, Schweers, Balach & Baugher, 1993; Coggan, 1997). Male suicide rates have been consistently higher over time compared to their female counterparts because males tend to choose more lethal means of suicide, such as hanging or firearms. In contrast, females tend to choose less lethal means, such as ingesting pills or gas (Ohberg, Lonqvist, Sarna & Vuori, 1996; Patton, Harris, Carlin, Hibbert, Coffey, Schwartz & Bowes, 1997).

¹ Maori are indigenous people of New Zealand.
In 1998, there were 416 male (rate of 152.5 per 100,000) and 676 female (rate of 256.4 per 100,000) hospitalisations for self-inflicted injury for the 15-24 year age group. Comparing the data from 1997, male hospitalisations are slightly up from 401 (rate of 145.7 per 100,000) and female hospitalisations are down from 779 (rate of 290.8 per 100,000). In 1998, the hospitalisation rate for Maori females was 217.8 per 100,000. The hospitalisation rate for Maori females was below the non-Maori female rate (266.1 per 100,000), but higher than the non-Maori male rate (147.3 per 100,000). Hospitalisation data collected by the Ministry may include those people who have been admitted more than once during the same year. However, some caution needs to be taken with these figures, as records are only kept for those who were admitted to hospital and not for (a) those who were treated in the hospital but not admitted, or (b) those who were treated by their General Practitioner (GP), or (c) those who did not require any medical intervention (New Zealand Ministry of Health, 2000).

Suicide before the age of 15 is extremely rare, regardless of country of origin (Aro, Marttunen and Lonnqvist, 1993; Holinger, Offer, Barter and Bell, 1994). In New Zealand, it has been reported by the New Zealand Ministry of Health (1998) that, on average, the number of those who completed suicide under the age of 15, ranges from 0 to 4 each year. There are three prevailing explanations for the low suicide rate among those under 15 years of age: (a) less stress – compared with adolescents, children are exposed to fewer precipitants and risk factors that can influence suicidal behaviour; (b) more resilience – children are equally exposed to these risk factors, but
they have a higher threshold before these factors lead to suicide; and (c) immaturity – planning and acting out of suicidal behaviour requires a certain level of maturity not quite reached by children and younger adolescents (Aro et al., 1993; New Zealand Ministry of Health, 1998).

In summary, the latest provisional figures published by the New Zealand Ministry of Health (2000) indicate that the youth suicide rates from 1996 to 1998 seem to be very similar and lower compared to the 1995 rate. However, the overall general trend has shown a significant increase in the youth suicide rate over the last 10 years (New Zealand Ministry of Health, 1998). The suicide rate does not seem to have altered much for those under 15 years, with suicide continuing to be identified as a rare occurrence for this age group (New Zealand Ministry of Health, 1998).

It is the alarming increase in suicide for those aged 15-24 years that is the major impetus for the present study. Youth suicide is a significant social problem for New Zealand and would seem to be a response to a variety of social pressures which face youth today, such as alcohol/drugs, violence, abuse, cultural alienation, changes in the family structure, the reduced influence of the church, high unemployment and trends toward a more individualistic society (New Zealand Ministry of Health, 1998). These rising rates demonstrate that more research is needed in this area in order to better understand why maladaptive coping techniques, such as suicide, continue to be used as a response to increasing societal pressures. In addition, they suggest that if clinicians, who assess and treat at-risk youth, are provided with more knowledge
about suicide, then they may be better equipped to assist in its management and prevention.

1.1.2 The Need for the Examination of the Assessment and Intervention Process for Suicidal Adolescents

Over the past several years, the focus of New Zealand research on adolescent suicide has largely been on the examination of risk factors (see e.g., Beautrais, 1996; Beautrais, Joyce & Mulder 1994; 1996; 1998a, 1998b, 1998c; Beautrais, Joyce, Mulder, Fergusson, Deavoll & Nightingale, 1996; Fergusson & Lynskey, 1995a, 1995b). Coggan (1997) and Coggan, Disley, Patterson & Norton (1997) have also investigated youth suicide with a particular emphasis on identifying those youth at-risk. The New Zealand literature base appears to indicate that there is a need for more empirical research to examine potentially modifiable risk factors and to design, implement and evaluate effective interventions (Coggan, 1997).

Research conducted by Beautrais (1996), Beautrais, Joyce and Mulder (1994; 1996; 1998a, 1998b, 1998c) and Beautrais, Joyce, Mulder et al. (1996) suggest that there are several factors which put youth at-risk of suicidal behaviour. The Canterbury Suicide Project, led by Beautrais, began in 1991 following a statement from Professor Peter Joyce, Department of Physiological Medicine, Christchurch Clinical School, that the “Health Goals for New Zealand" announced by the Minister of Health in 1990 did not include mental health goals. It was discovered that this exclusion was largely due to the fact that there were no easily measurable outcomes in the mental health field. Since its inception, the research group has produced several valuable findings on
youth suicide, namely that: (a) adolescents who make serious suicide attempts have high rates of mental disorders and comorbid disorders (Beautrais, Joyce, Mulder, et al., 1996), (b) young people from socially disadvantaged backgrounds are at elevated risk of serious suicide attempt (Beautrais, Joyce & Mulder, 1998a), and (c) young people making serious suicide attempts have increased rates of psychiatric contact (Beautrais, Joyce & Mulder, 1998b). The importance of the work produced through the Canterbury Suicide Project is that it (a) provides rigorous scientific and empirical information on the risk factors for adolescent suicidal behaviour in New Zealand, and (b) longitudinally establishes factors which increase vulnerability for at-risk youth.

Complementing the aforementioned research is New Zealand research conducted by Fergusson and Lynskey (1995a, 1995b). Fergusson and Lynskey (1995a) examined attempted suicide, adolescent problems of adjustment, psychopathology and childhood circumstances as part of a longitudinal study of a birth cohort of 954 New Zealand children studied at annual intervals to the age of 16. They found that early disadvantageous childhood and family circumstances led to increased risk of adolescent psychopathology and adjustment problems which in turn led to increased risk of adolescent suicidal behaviour (Fergusson & Lynskey, 1995a). Utilising the same sample as in the previous study, they were also able to identify valuable differences between those young persons who attempted suicide compared to those who experienced ideation only (Fergusson & Lynskey, 1995b). They found that attempters reported a greater number of psychosocial risk factors including psychiatric disorder, adjustment problems and adverse childhood circumstances compared to ideators. The findings from Fergusson and Lynskey (1995a, 1995b)
further extend understanding about suicidal behaviour in New Zealand by identifying
group differences between those who attempt and those who ideate.

The aforementioned research provides empirical evidence of risk factors that place
vulnerable youth at-risk of suicidal behaviour, whether it be ideating or attempting.
As mentioned previously there is a necessity for further research in New Zealand to
examine risk factors and to design, implement and evaluate interventions directed
toward preventing suicidal behaviour (Coggan, 1997). It is this noticeable need for
researchers to extend their research to include the evaluation of assessment and
intervention strategies which is the second impetus for this research project.

International youth suicide research indicates that there is a need to link identifiable
risk factors to risk-level assessments and safety interventions recommended by
clinicians for at-risk youth. To date, there appear to be two important studies
examining the relationship of risk factors to safety interventions. These studies have
been conducted by Dicker, Morrissey, Abikoff, Alvir, Weissman, Grover and
Koplewicz (1997) and Morrissey, Dicker, Abikoff, Alvir, DeMarco and Koplewicz
(1995). Both studies used a questionnaire containing 64 vignettes describing
adolescent suicide attempts, with each vignette differing with respect to the
combination of six variables related to lethality of attempt (e.g., gender, depression,
conduct disorder/substance abuse, previous attempts, suicidal relative and family
supports). Respondents were asked to judge the appropriateness of hospitalisation for
each vignette. The Dicker et al. (1997) study utilised a sample of psychiatric residents
and Morrissey et al. (1995) utilised a sample of experienced child, adolescent and
family clinicians. They found that residents recommended hospitalisation more frequently than did experienced child, adolescent and family clinicians. In addition, they found that a preference for hospitalisation was significantly predicted by all risk factors except gender. These studies provide evidence of a link between risk factors and safety interventions in suicidal adolescents. The current project was interested in extending these findings by determining whether there was a link between risk factors, risk-level assessments and safety interventions.

1.1.3 Empirical and Theoretical Research on Social Support and Suicide

Social support has clearly been demonstrated as an identifiable risk factor which places youth at-risk of suicidal behaviour (see Campbell, Milling, Laughlin & Bush, 1993; D’Attilio, Campbell, Lubold, Jacobson & Richard, 1992; De Man & Leduc, 1995; Maris, 1997; Morano, Cisler & Lemerond, 1993; Whatley & Clopton, 1992). It has been shown that suicidal adolescents perceive less supportive relationships within their family unit (Allison, Pearce, Martin, Miller & Long, 1995; Campbell et al., 1993) and report less satisfaction with the support received from friends and family (D’Attilio et al., 1992; De Man & Leduc, 1995; De Man, Leduc & Labreche-Gauthier, 1993; Eskin, 1995; Morano et al., 1993; Whatley & Clopton, 1992). Social support was specifically chosen as the focus for this study due to the fact that previous research has demonstrated that it is a well-known risk factor for suicidal behaviour.

Currently, there appears to be a plethora of definitions of social support (see e.g., House & Kahn, 1985; Pierce, Sarason, Sarason, Joseph & Henderson 1996; Thompson, 1995; Vaux, 1988). It is the intention of this study to “unpack” the
concept of social support and present a more unified and integrated conceptualisation of the term based on the work by House & Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux (1988). The aim of this study is to suggest a unified social support model that may increase understanding of how this risk factor might influence clinicians’ risk-level assessments and associated safety interventions for suicidal adolescents. Such understanding could provide the groundwork necessary for revising and/or refining current assessment procedures utilised within child and youth mental health clinics.

Similar to Dicker et al. (1997) and Morrissey et al. (1995), the present study was interested in examining the impact that risk factors have on safety interventions recommended by clinicians. The present study extends this investigation by examining how social support, in particular, impacts upon both risk-level assessments and safety interventions recommended by clinicians for suicidal youth. It is important to note that this study focuses on the clinicians’ appraisal of social support in risk-level assessment and safety planning which needs to be differentiated from the adolescents’ perception of social support.

1.1.4 Government Guidelines

A third reason for this research project rests in what Beautrais (1996) states is an acknowledgement by the New Zealand government that clinicians working in the area of youth suicide and mental health need to be provided with guidelines to assist in the assessment, treatment and prevention of this widespread problem. In March 1998, the New Zealand Government released the New Zealand Youth Suicide Prevention
Strategy. This strategy provides a framework for understanding suicide prevention, and signalling the steps a range of government agencies, communities and service providers must take in order to reduce suicide. The aim of this strategy is to increasingly coordinate all suicide prevention initiatives and to identify and address any gaps in current services aimed at treating at-risk youth. The New Zealand Ministry of Health has the leadership role for promoting, co-ordinating and communicating the implementation of the strategy. Some examples of suicide prevention initiatives include the development of recent guidelines for schools in the prevention, recognition and management of young people at risk of suicide commissioned by the Ministry of Education and National Health Committee (Beautrais, Coggan, Fergusson & Rivers, 1997); guidelines for clinicians on the management of suicidal patients (New Zealand Ministry of Health, 1993); a document produced through the Ministry of Health which reviews the evidence and research on youth suicide (Beautrais, 1998); the development of a service called Suicide Prevention Information New Zealand (SPINZ) funded by the Ministry of Youth Affairs which provides advice and information to the community on youth suicide and youth suicide prevention; and the current expansion of specialist mental health services for children and young people within New Zealand (New Zealand Ministry of Health, 2000).

Funding from the government for a National Youth Suicide Prevention Strategy demonstrates its commitment to placing this issue as a priority on its agenda (New Zealand Ministry of Health, 2000). This national acknowledgement by the
government is further motivation to continue the development of research on youth suicide.

1.1.5 Professional and Personal Experiences

A final impetus for this research project relates to my past five years’ work experience in the New Zealand mental health sector. I was recently employed as a social work clinician for the Child, Adolescent and Family Service (CAFS) assessing and treating young people for a number of mental health issues ranging from suicidal behaviour to depression and anxiety. My caseload at CAFS largely consisted of depressed, suicidal adolescent females. I conducted crisis assessment and intervention strategies working from a variety of theoretical perspectives and frameworks, such as crisis intervention theory, systems theory, and engaged in brief-solution oriented therapy and cognitive-behavioural therapy.

It was noted in many discussions with my colleagues that one of the most difficult and challenging groups to work with were those adolescents who had engaged, or were presently engaging, in self-harming behaviour. My interest in working with these adolescents largely arose out of the challenge that they presented me with in my work. My dedication and commitment to helping these young people was further strengthened as I began to see them meet their goals and become healthy, active members of society.

Throughout my career thus far, I have also been faced with some failures. I do not see these past clients as “failures” per se, rather I see them as losses from which I have
gained a better understanding and knowledge of how to help them. I have been fortunate enough not to experience a loss of a client by suicide. However, the losses that I refer to are instances where the client has dropped out of therapy due to its constant challenge or where the client has made a repeated attempt(s) or a number of subsequent attempts. The work with these clients who presented challenges to myself, as a therapist, spurred my interest to learn more about how to effectively assess and intervene within this difficult population. It was the overall goal of this project to conduct research which would assist clinicians in assessing, treating and managing at-risk youth.

I have been very fortunate to have been raised in a healthy family environment by very caring parents. My desire to assist those who have not been so fortunate arises from wanting to give what I have been so very lucky to have received - supportive surroundings which have allowed me to reach my fullest potential. As a result of my upbringing, I developed an interest in wanting to understand how social support can act as a deterrent or instigator to our well-being, and in particular, to suicidal behaviour. It is these past professional and personal experiences which have largely motivated me to undertake a commitment to add to the research on youth suicide.

1.2 Summary and Outline of Present Research Project

This thesis aims to contribute to current knowledge about youth suicide in New Zealand. The project consisted of both an archival and a vignette study. The archival study was based on a record review of two groups of suicidal adolescents (50 attempters and 50 ideators) who presented for an acute assessment at an outpatient
mental health service in New Zealand. The vignette study involved administration of a questionnaire to 23 CAFS clinicians. The questionnaire contained vignettes with questions pertaining to risk-level and safety interventions.

The primary aim for both the archival and vignette study was to examine the interrelationship between social support, risk-level assessment and safety interventions within the context of a proposed social support model. A social support model for youth suicide, incorporating the interrelationships between support, risk and safety, is proposed based on theoretical material derived from House & Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux (1988). Each of the latter theorists presents his or her own conceptualisation of the term social support. It was the intention of this project to develop, based on these conceptualisations, an integrated understanding of social support in order to provide the framework for the study’s subsequent research questions and hypotheses. The premise of this model was to determine to what degree social support, whether it be perceived as positive or negative, impacted upon clinicians’ decisions for patient risk-level (e.g., low, medium or high) and safety interventions (e.g., hospitalisation, medication). Again, the focus of this study being on the clinicians’ appraisal of social support in risk-level assessment and safety planning, which is different from the adolescents’ perception of social support. A second aim of this project was to establish a decision-making model for risk assessment and safety recommendations utilising principles from a grounded theory approach. As this model was to be developed from data provided by the clinicians, no a priori hypotheses were made.
Suicidal behaviour can be found at all ages from childhood to adolescence through to old age. Research shows that suicide is related to many social, psychological and biological factors (Botsis, 1997). Berman and Jobes (1991) note that the more risk factors any given individual presents with at any given time, the greater the risk for expressing suicidal behaviour. In contrast, the more protective factors (e.g., caring family environment) an individual has, the less likely it is that he or she will be a candidate for expressing suicidal behaviour (Rak & Patterson, 1996). Prediction of future suicidal behaviour is difficult, as each individual differs in terms of the presence of the aforementioned factors and what may lead one person to suicidal behaviour may not lead another (Botsis, 1997).

It is important to understand the social milieu which surrounds the increased trend in youth suicide. Along with increased rates of suicide, Botsis (1997) indicates that increased rates of violence, crime and alcohol/drug abuse in the young have also been observed. Botsis (1997) indicates a need for the development of a theoretical concept which will integrate prevailing research in order to have a better understanding of, and to acquire more insight into, suicidal behaviour. It is the intention of this research project to produce a theoretical model and related theoretical concepts which may assist in achieving this necessary integration.

1.3 Presentation of Chapters - Outline

As discussed, Chapter 1 details the justification for the present research project. It argues for a focus on social support and suicide using the available research and theoretical material in this area.
Chapter 2 takes an in-depth look at the theoretical principles underlying the conceptualisation of the term social support. A social support model is proposed that integrates the existing conceptualisations of social support as put forth by House & Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux (1988). Following this discussion, the research linking family conflict, social support, risk-level assessment and safety interventions to adolescent suicidal behaviour is applied to the proposed model. The proposed social support model integrates the concepts of negative and positive support, risk-level assessment and safety interventions. In addition, the research on the different levels of suicidal behaviour (attempting versus ideating) is reviewed within the context of the model in order to demonstrate how this differentiation might impact upon clinical decision-making for risk-level and safety interventions. This chapter also outlines how the social support model can assist in making a valuable contribution to the research on youth suicide. In addition, Chapter 2 identifies connections between the research framework and the proposed research questions and hypotheses. The chapter concludes with an examination of how the archival study is used as the foundation for the development of the vignette study. A brief commentary on the importance of justifying the need for the vignette study is also provided.

Chapter 3 details the methodology for the archival study (e.g., archival research design) and Chapter 4 outlines the methodology for the vignette study. Both Chapters 3 and 4 detail participants, setting, measures, procedure, data analysis and ethical issues. In addition, Chapters 3 and 4 include clear operationalisation of all concepts to be assessed in this project. For the archival and vignette study, the concepts that were
operationalised included negative support, positive support, negative support severity, risk-level assessment and safety interventions. The process for the development of the questionnaire used in the vignette study is outlined in Chapter 4.

Chapter 5 contains the results for the archival study and Chapter 6 contains the results of the vignette study. Reliability statistics were computed for both studies and indicated good reliability. For the archival and vignette study, testing included chi-square analyses and loglinear model analyses. The vignette study also used correspondence analysis (CA) and multiple correspondence analysis (MCA) in testing the data. These tests were largely chosen due to the categorical nature of the data. Tests indicated that there were several significant interactions found between social support, risk-level and safety interventions. Chapter 6 presents results using inductive content and theme analysis in order to help describe a decision-making model. The decision-making model outlines how clinicians explain their reasons for recommending particular safety interventions and the steps that they undertake when deciding on risk-level and appropriate interventions for at-risk youth.

Chapter 7 incorporates both past and current research in an effort to discuss the results. The social support model is revised accordingly, based on the results from the archival and vignette studies. The discussion includes a commentary on the original contribution that the social support model has for youth suicide research. Chapter 7 also discusses the limitations of the present study with respect to selection bias, data collection methods, coding and statistical analysis, and reliability. The implications of the results are presented in terms of: (a) treatment and prevention of youth suicide,
(b) proposed and current services and procedures for at-risk youth, and (c) future research. The thesis indicates the importance that this project has for the advancement of knowledge in the area of youth suicide.
CHAPTER 2
THEORETICAL FRAMEWORK OF SOCIAL SUPPORT AND RESEARCH LINKING SOCIAL SUPPORT, RISK-LEVEL AND SAFETY INTERVENTIONS TO YOUTH SUICIDE

2.1 Introduction

The aims of this chapter are as follows: (a) to present a synthesis and analysis of current conceptualisations of social support; (b) to present a unified and integrated model of social support; (c) to demonstrate a need to distinguish or differentiate levels of suicidal behaviour (attempting versus ideating) and the implications that this need has for the proposed social support model, particularly as it will be proposed that different levels of suicidal behaviour will influence the type of risk-level assessments and safety interventions recommended; (d) to demonstrate a link between family conflict, social support, risk-level and safety interventions; and (e) to apply the research on social support, risk-level and safety interventions to the proposed social support model. It is the primary aim of this thesis to examine the interrelationship between social support, risk-level assessment and safety interventions and to propose a social support model based on these relationships.

This chapter focuses on the theoretical conceptualisations of the term ‘social support’ as put forth by several authors (see e.g., House & Kahn, 1985; Pierce et al., 1996, Thompson, 1995 and Vaux, 1988). In addition, it examines the research on social support, risk-level assessment and safety interventions as they relate to youth suicide. The chapter begins with a presentation of the conceptualisations of social support and an analysis of this material. Following the analysis, these conceptualisations are
integrated in order to provide the framework for the study’s research questions and hypotheses. An examination of risk factors (including social support) and the differentiation of the various levels of suicidal behaviour (e.g., attempting versus ideating see section 2.4) is undertaken prior to an examination of the interrelationship between family conflict, social support, risk-level assessment and safety interventions for adolescent suicidal behaviour. It will be proposed that there may be a relationship between the different levels of suicidal behaviour and the availability and quality of social support. More specifically, it will be argued that those persons who display more extreme suicidal behaviour come from family environments characterised by poor social interactions and conflicts, thereby reducing the likelihood of the family unit being available to provide any helpful support. It will thus be argued that an implication of the relationship between family adversity and suicidal behaviour may be that there is evidence for a relationship between social support and suicidal behaviour.

2.2 Theoretical Conceptualisation of Social Support

House and Kahn (1985) indicate that social support has been defined operationally in terms of the existence, quantity and structure of social relationships. Moreover, they state that social support has also been defined with respect to the functional content of relationships, such as in the exchange of instrumental or emotional support. House and Kahn (1985) argue that there are a variety of ways of conceptualising social support.
House and Kahn (1985) define 'social support' as a theoretical concept embodying social network (i.e., structural characteristics existing among relationships such as frequency of contacts and/or the number of people within a network), social relationships (i.e., social interactions people have with others around them) and the provision and appraisal of support. These authors argue that if researchers are to accurately assess this concept, then it is essential to identify and define both (a) the process involved in the exchange of social support (e.g., provision and appraisal), and (b) concepts related to social support (e.g., social support network). This clarification is needed because it is important to know whether research is examining social support directly or indirectly. An example of a direct measure of social support would be assessing the provision and level of appraisal of instrumental or emotional support, whereas an indirect measure would be assessing the size of the support network. The size of the support network is an indirect measure in that it may provide information about the number of persons to whom one can turn for support, but it does not provide information about whether the support is perceived as helpful or not (appraisal) and what type of support the network itself provides.

As mentioned previously, House and Kahn (1985) state that support involves the exchange of supportive behaviour. House and Kahn (1985) state that within the exchange of social support, researchers should be measuring the source of the support (e.g., spouse or partner, other relatives, friends, neighbours, work supervisor, co-workers, service or caregivers, self-help groups and health professionals), the type of support given and/or received (e.g., emotional, instrumental, appraisal and informational), and the appraisal of support. House and Kahn (1985) emphasise the
importance of assessing the individual's appraisal of support. For what one person perceives as helpful another may not. By its very nature, support implies behaviour of a positive quality. However, this is not always the case, particularly in situations where abuse is present. For example, abusive people may think that they are providing support during the loving/contrite phase of the abuse cycle when in fact they are perpetuating the abuse, as it has been shown that the loving/contrite phase is more often than not followed by continued abusive behaviour (Walker, 1979). Two important implications of their model are that (a) researchers need to be clear about what they are measuring (e.g., whether it is supportive behaviour, support appraisal or size of support network), and (b) that researchers need to acknowledge the multidimensional nature of social support when operationalising the term.

Compared to House and Kahn (1985), Pierce et al. (1996) use somewhat different terminology in their conceptualisation of the term social support. Pierce et al. argue that social support encompasses the interaction between three related concepts: support schemata, supportive relationships and supportive transactions. ‘Support schemata’ refer to the knowledge structures within an individual. ‘General support schemata’ contain information about the likelihood that others, in general, will be able to, or willing to meet various needs for support. ‘Relationship-specific schemata’ contain information about the likelihood that specific individuals will provide support when it is needed. ‘Supportive relationships’ refer to those relationships which an individual turns to during times of need or crisis. Based on the information contained within the relationship-specific schemata, individuals will seek out only those relationships in which they are most likely to receive some support. Finally,
‘supportive transactions’ refer to the behavioural exchanges between at least two, if not more, individuals. These authors argue that it is necessary to distinguish between the observable act of support (e.g., emotional, instrumental), and the perception of the support given/received (appraisal). Similar to House and Kahn (1985), Pierce et al. are arguing for a differentiation between the provision of supportive behaviour (act) and the appraisal of supportive behaviour largely because there may be different perceptions of the support given as determined by the recipient and provider (i.e., the provider may see it as helpful but the recipient may not).

The conceptualisation of social support, as proposed by Pierce et al. (1996), suggests that the development of positive support schemata is largely determined by the occurrence of a positively appraised supportive transaction. Positive support schemata consist of cognitive information which people process and store in their long-term memory as a consequence of positive experiences of seeking and receiving support. These positive support schemata influence the development of supportive relationships for both the present and the future, as the likelihood of returning to the same or similar person(s) for support increases with each successful supportive transaction. If the transaction is appraised as negative or unhelpful, then this would result in the development of negative support schemata. House and Kahn (1985) also describe a similar process which occurs during a transaction of supportive behaviour (i.e., the emphasis on provision and appraisal of support). However, the difference is that Pierce et al. extend their discussion by providing specific labels for the cognitive process involved in support transactions.
In contrast to House and Kahn (1985) who believe that there are four types of supportive behaviour, Pierce et al. (1996) propose that there are really only two types of supportive behaviour - emotional and instrumental. Pierce et al. argue this case because they feel that there is far too much overlap in meaning between the different types of support. For example, the provision of advice or guidance might also be interpreted as emotional support. However, even a simplified distinction between emotional and instrumental support is not without its own limitations. For example, an expression of instrumental support may also be interpreted as an expression of emotional support, such as the person who lends his friend money in order to pay off a debt. This friend would possibly perceive the act of lending the money as an expression of love or kindness (Pierce et al., 1996).

An implication of Pierce et al.'s (1996) social support conceptualisation is that research on social support needs to be clear about defining the different types of supportive behaviour. As demonstrated, many different types of supportive behaviour overlap in meaning, particularly with respect to emotional support (Pierce et al., 1996). Another implication of Pierce et al.'s social support conceptualisation is further support for the argument that social support involves the complex interplay and exchange of behaviour between two or more persons within a social network. Again, the emphasis being on the importance that interpretation and appraisal has for measuring social support.

A third model of social support is that advanced by Thompson (1995) in his analysis of child maltreatment. Similar to House and Kahn (1985) and Pierce et al. (1996),
Thompson (1995) also stresses the need to assess both the social network, as well as the way in which support is appraised within this network. He also emphasises the importance of describing both the structure of the network, as well as the process involved when an exchange of social support occurs between network members.

In his conceptualisation of social support, Thompson (1995) distinguishes between 'social networks' and 'supportive behaviour.' 'Social networks' include the people to whom one can turn when in need of support and the perception of that support. 'Supportive behaviour' refers to the act of supportive behaviour provided (e.g., emotional, instrumental).

Thompson (1995) makes reference to structural features which he believes belong to social networks and includes: network size, social embeddedness, dispersion, stability and extensivity (see Table 1). These features refer to the quantity aspect of social support and include the size of the network, the consistency of the network over time, the frequency of contacts with members in the network and the degree to which contact occurs in large groups versus small groups. In quantifiably measuring social networks (i.e., counting the frequency of contacts), Pierce et al. argue that there exists a danger of overlooking both the nature and extent of social support given and/or received within these networks. For example, Barrera (1986) notes in his research that measures of social embeddedness (e.g., frequency of contacts) have only a moderate association with the amount of support that individuals report receiving from other network members. This situation is due to the fact that structural characteristics of
Table 1.

Structural and Affiliative Definitions for Social Networks.

<table>
<thead>
<tr>
<th>Structural Terms</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>Network Size</td>
<td>The number of persons with whom the individual has contact. However, many members of the social network may not assume supportive roles.</td>
</tr>
<tr>
<td>Social Embeddedness</td>
<td>The frequency of contact with network members.</td>
</tr>
<tr>
<td>Dispersion</td>
<td>The ease with which individuals can obtain contact with social network members.</td>
</tr>
<tr>
<td>Stability</td>
<td>The consistency of network associates over time. Different components of the network show different rates of stability over time.</td>
</tr>
<tr>
<td>Extensivity</td>
<td>The degree to which social interaction within the network occurs in small groups rather than large groups. For example, intimacy is more difficult to achieve in a larger group than a smaller group or dyad.</td>
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</table>

<table>
<thead>
<tr>
<th>Affiliative Terms</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>Valence</td>
<td>The emotional quality of relationships with network members. Focuses on the perception of the affective quality of network relationships (positive or negative).</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Whether support in relationships is mutual or unidirectional.</td>
</tr>
<tr>
<td>Homogeneity</td>
<td>The extent to which network members share common attributes, such as their socioeconomic status or race.</td>
</tr>
<tr>
<td>Multiplexity</td>
<td>The number of different functions or roles assumed by individuals within a social network (e.g., mother, friend)</td>
</tr>
<tr>
<td>Density</td>
<td>The extent to which network members are themselves associated with each other.</td>
</tr>
<tr>
<td>Perceived Support</td>
<td>The extent to which individuals subjectively expect support from their relationships with network members.</td>
</tr>
</tbody>
</table>

(Thompson, 1995)
social networks cannot, or do not seem to indicate the quality of supportive transactions (either giving or receiving). Thompson (1995), in his theoretical development of the social support construct, seems to be arguing that there needs to be a clear distinction between both quality and quantity of support. The latter appears to be largely an objective measurement, whereas the former appears to be more of a subjective measurement. Thompson adds something different to understanding social support, compared to House and Kahn (1985) and Pierce et al. (1996), in that he does not generically discuss quantity and quality of social support. Rather, Thompson specifically mentions the importance of distinguishing between the structural (quantity) and affiliative features (appraisal) of social support networks and their related terminology (see Table 1).

Thompson (1995) proceeds to develop his theoretical base by stating that there need to be new ways of portraying social networks that emphasise the meaning of network associates to the individual. These concepts, which he identifies as affiliative features (versus the previous structural features), include such things as valence, reciprocity, homogeneity, multiplexity, density, perceived support and enacted support (see Table 1). Thompson (1995) seems to suggest that affiliative features are a little bit more difficult to study than structural features. He also seems to be suggesting that affiliative features tend to emphasise the subject’s perception of support.

Thompson (1995) suggests then that there are three important aspects of his model: support network structural features (quantity), support network affiliative features
(quality) and supportive behaviour (act). For Thompson, the exchange of support occurs within the context of the previously mentioned supportive network. Supportive behaviour refers to the act of supportive behaviour provided and includes emotional, advice/guidance, instrumental and skill acquisition. Similar to House and Kahn (1985), Thompson (1995) argues for differentiation of four types of supportive behaviour. However, both Thompson (1995) and House and Kahn (1985) fail to take into consideration the argument, as presented by Pierce et al. (1996), that there is far too much overlap in meaning between the different types of supportive behaviour. As will be elaborated further on in the critique of these conceptualisations, this argument is supported by the correlations noted across subscales of questionnaires, such as the Interpersonal Support Evaluation List (ISEL) and the Social Provisions Scale (SPS), intended to measure distinctly separate categories of supportive behaviour (Cohen, Mermelstein, Kamarck & Hoberman, 1985; Vaux, 1988).

Similar to House and Kahn (1985), Thompson (1995) details what constitutes a social network and how social support is both provided and appraised within the social network. Again, the important similarity is their ability to outline the process that is involved when a transaction of social support occurs. In this respect, Thompson (1996) uses terminology very similar to that of House and Kahn (1985) and Pierce et al. (1996). However, the main difference is in Pierce et al.’s conceptual connection between supportive behaviour and development of positive and negative support schemata. With respect to terminology, both House and Kahn (1985) and Thompson (1996) make similar references to the importance of understanding the structural context within which supportive transactions occur (e.g., size, frequency). Although
they use slightly different terminology, both of these authors emphasise that social support researchers need to recognise the structure and function of social support networks.

Similar to House and Kahn (1985), Pierce et al. (1996) and Thompson (1995), Vaux (1988) contributes to an understanding of how supportive behaviour occurs within the context of a support network. This contribution takes into consideration the interpretation of the supportive behaviour provided and received. Again, as demonstrated by the previous conceptualisations, the appraisal of the act and the act itself are different components of social support. Vaux essentially argues that social support is a complex, multidimensional, higher-order theoretical construct which involves the interaction between support network resources, supportive behaviour and subjective appraisals of support.

Vaux (1988) defines ‘support network resources’ as the subset of the larger social network to which a person would turn for help when managing demands or attempting to meet goals. The type of help sought by any one particular person is referred to as supportive behaviour (Vaux, 1988). ‘Supportive behaviour’ refers to specific acts generally recognised as being intentional efforts to help a person. These acts include emotional, advice/guidance, practical, financial/material and socialising behaviour. Despite good intentions, supportive behaviour is not necessarily always helpful, as the outcome will depend upon the timing, mode and amount of supportive behaviour that occurs (Vaux, 1988). Finally, as in the case of Pierce et al., ‘support appraisal’ refers to the subjective, evaluative assessments of a person’s supportive
relationships and the supportive behaviour that occurs within them. These appraisals can be either of a negative or positive quality (Vaux, 1988). Appraisals are seen as the primary indicator of how well support functions are being served. Examples of positive appraisals include satisfaction, feeling cared for, respected or involved, and having a sense of attachment, belonging, or reliable alliance (Vaux, 1988). Examples of negative appraisals include not feeling a sense of belonging, and not feeling loved, cared for or understood (Vaux, 1988).

Vaux (1988) argues that individuals turn to their network resources for a variety of supportive behaviours and will then evaluate the type of support given and/or received. House and Kahn (1985), Pierce et al. (1996) and Thompson (1995) also describe this interface between social support network, supportive behaviour and support appraisal. The important point to note here is that House and Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux (1988) all demonstrate that there are different components involved in an exchange of social support; that membership of the network is largely determined by the exchange and nature of appraisal (positive versus negative appraisal); and that there is a distinct difference between the supportive act and the interpretation or appraisal of support.

(1985) and Vaux (1988) use the terms provision and appraisal of supportive behaviour, but make no specific reference to support transaction. However, the concept of transaction is implied within their descriptions of how supportive behaviour is exchanged. Two main differences among the theorists can be noted in their use of terminology: (1) Pierce et al. are the only theorists who use cognitive psychology concepts such as social support schemata, and (2) Pierce et al. are the only theorists who do not explicitly refer to social support networks. Despite these apparent differences, each group of theorists makes reference to the provision and appraisal of supportive behaviour.

In summary, social support appears to be a complex and multidimensional construct. For example, House and Kahn (1985) argue that social support involves interaction between three concepts: support networks, social relationships and social support (behavioural transaction). Pierce et al. (1996) argue that social support involves interaction between support schemata, social relationships and supportive transactions. Thompson (1995) states that social support involves exploring the relationship between social networks and supportive behaviour. Finally, Vaux (1988) argues that social support involves a complex interaction between social network, supportive behaviour and subjective appraisals of support. Each model is slightly different in its approach to “unpacking” the construct of social support, yet similar with respect to the methodology of examining social support as a higher order theoretical construct and placing an emphasis on differentiating the appraisal of supportive behaviour and the act itself.
2.3 A Comparison of the Principles of Social Support

Despite the different language or terms used, the models outlined above appear to have many commonalities, such as their constant reference to what is known as quantity and quality of social support. Quantity of social support refers to the actual measurable aspect of support (e.g., the frequency of social contacts). Quality of social support refers to a person's appraisal of received support, whether that support is perceived as helpful or unhelpful. This distinction between quantity and quality of social support is important because it acknowledges the multidimensionality of the construct and demonstrates that researchers need to explore the interface between the perception of support and the support network itself, which may change depending upon the provision and appraisal of supportive behaviour. For example, if support is unable to be elicited from certain members in the network, then they may no longer be included as part of the support network, as the recipient will be less likely to return to them for support on future occasions. It is proposed that if the appraisal of support is negative, then the recipient may be less likely to return to that particular network member(s) for support on future occasions. Regardless, the important point to note here is that each conceptualisation attempts to define the quantity and quality aspect of social support, and in doing so, acknowledges the important interface between support networks, supportive behaviour and support appraisal.

Another common aspect of the four models is their effort to differentiate the act (behaviour) of support and the perception or appraisal of that support (cognitions). The act of support refers to the supportive behavioural exchanges between two (or more) individuals. It is also generally agreed that the intention of support is a positive
quality. However, as discussed, the interpretation of support received can be of a negative or positive quality. The transactional process between support given and/or received is a complex one and generally involves an interplay between recipient and provider. It involves examining and exploring how the provider’s support (e.g., an instrumental or emotional act) impacts upon the recipient and his/her interpretation of the support received. This transaction then will determine whether future transactions will occur within the same or similar relationships. As stated, the distinction between the act and the perception of support is an important one, as it largely determines the composition of the network resource itself.

A final common theme among the models is that they tend to acknowledge the multidimensional aspect of the concept of social support. It is believed that there is no one single definition of social support, rather it is a higher-order theoretical or superordinate construct which encompasses an interaction between a variety of different components and/or features, such as social networks, quality and quantity of social networks, supportive behaviour and appraisal (or perception) of supportive behaviour.

There is one major limitation within the previously discussed conceptualisations of social support. That is, it appears as if there is disagreement about the number and types of supportive behaviour available within the social support network. House and Kahn (1985) distinguish between four types of supportive behaviour, Pierce et al. (1996) distinguish between two, Thompson (1995) distinguishes between four, and
Vaux (1988) reaches the conclusion that there are generally five agreed-upon types of supportive behaviour.

A common element among the proposed types of supportive behaviour is the identification and distinction made between emotional and instrumental support. Emotional support refers to behaviours that communicate to an individual that he or she is cared for and loved. It encompasses such things as socialisation (spending time with), provision of advice/guidance, and feedback. Examples of emotional support include: having someone to listen to you when you need to talk; having someone to provide guidance or feedback in a difficult situation; someone you can rely on for help; someone you can be yourself with; someone you can spend time with; someone who will listen non-judgementally and openly; someone who will comfort you; and someone who accepts you for who you are. These examples appear as items in the Social Support Questionnaire (Sarason, Levine, Basham & Sarason, 1983) and the Social Support Behaviours Scale (Vaux, Riedel & Stewart, 1987). Instrumental support refers to behaviours that provide assistance in task-directed coping efforts (e.g., practical/tangible) (Pierce et al., 1996). An example of instrumental support would include anything from helping a person to move house, to lending them money.

The difficulty is that there is far too much overlap between the various types of supportive behaviour previously discussed, which are intended, in fact, to be mutually exclusive of one another. The overlap existing among the many different types of social support (e.g., socialisation, emotional, instrumental etc.) may account for the substantial correlations observed across subscales intended to assess discrete types of
support (Pierce et al., 1996). For example, the four subscales of Cohen’s Interpersonal Support Evaluation List (ISEL) (material aid, emotional support, self-esteem support and belonging support) are consistently found to be highly intercorrelated (Cohen et al., 1985; Sarason, Sarason, Shearin & Pierce, 1987). Similar correlations have been observed between the subscales in the Social Provisions Scale (SPS) which include attachment, integration, opportunity for nurturance, reassurance of worth, reliable alliance, and guidance (Vaux, 1988).

There appear to be strong reasons for researchers to use emotional support as the primary measurement of supportive behaviour. Summarising the above discussion, these reasons can be outlined as follows. First, in some of the aforementioned questionnaires (SPS, ISEL), there appear to be quite high correlations between the various subscales which are intended to measure different areas of supportive behaviour (Cohen et al., 1985; Sarason et al., 1987). Second, the suggestion from each of the four models that there are many different types of supportive behaviour appears to be contradictory. That is, each type of supportive behaviour mentioned (e.g., instrumental, advice, guidance, etc.) is in some way either directly or indirectly related to emotional support. For instance, as previously argued a by-product of offering someone advice or guidance would be a feeling that the person offering the support is indirectly showing that he or she cares and values the person receiving that support. Similarly, if someone offers a person financial support (instrumental) in the form of money after they have lost a job, then this too would be seen as evidence of showing that person they are valued and well-cared for. In essence, all forms of
positively appraised supportive behaviour evoke feelings of empathy and caring, thereby further supporting the argument for the measurement of emotional support.

It is therefore argued that emotional support adequately captures the meaning of social support because each type of social support (e.g., instrumental, socialisation, advice, guidance) is in some way associated with emotional support.

Several important conclusions can be made from this discussion on the assessment of the theoretical conceptualisations of social support. These conclusions are as follows:

1. Social support is a single term which is definable by using a variety of related terms (e.g., social support = social networks, supportive acts, appraisal of support),
2. A transaction of social support involves a cognitive (perception) and behavioural (act) process,
3. The term social support, by its very nature, implies the support being received is of a positive quality,
4. That there is a qualitative (e.g., perception) and quantitative (e.g., size of network) component to the term social support, and
5. That there are several types of social support (instrumental, socialisation) with each type being related to emotional support.

These conclusions are actually the basic principles which underlie the theoretical conceptualisations of social support previously discussed (House & Kahn, 1985; Vaux, 1988; Thompson, 1995; Pierce et al., 1996). Although social support is a definable term, researchers need to acknowledge that there are some limits in measuring it. It has been established that there is no single definition of social support, rather it is a term which encompasses the interaction between a variety of different terms. Therefore, research can only measure the terms which it encompasses (e.g.,...
social networks, supportive behaviour, support appraisal) rather than directly measuring social support itself. Research also needs to be clear that some of the concepts contained within the definition for social support actually indirectly measure support. For instance, social support networks can provide an indication of the number of people to whom one can turn when needing assistance (whether it be money or seeking advice). However, this number is somewhat meaningless unless one can obtain an evaluation of whether the support given and/or received was helpful or not. Finally, it is important to acknowledge that social support, by its very nature, implies that the recipient will perceive it in a positive way. However, as has been illustrated, if the type of support being given is not appropriate (e.g., an individual may want money after losing a job, not advice) or provided at the wrong time, the recipient may perceive it negatively. In conclusion, research needs to be clear that social support may not always be perceived as helpful.

This assessment illustrates the need to present a comprehensive, inclusive, theoretical understanding of social support. Such an understanding would help to explain the multifaceted nature of social support and also address the difficulties in presenting a single definition for this construct. Integrating the above similarities and limitations can only assist in the development of a more unified conceptualisation of social support.

2.4 Differentiating Levels of Suicidal Behaviour

The previous discussion focused on the different conceptualisations of social support put forth by House and Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux
(1988). It is the purpose of this section to examine the relationship between the concept of social support, as a potential risk factor, and the different levels of suicidal behaviour (attempting (act) versus ideating (thoughts)) as a first step in establishing the foundation of a new social support model. This argument is based on the fact that social support is a variable which some researchers have found to have a significant relationship to suicidal behaviour in young people (Hollis, 1996; Maris, 1997). It is the intention of the discussion that follows to demonstrate why it is essential to differentiate between those who attempt and those who ideate and how social support may act as a potential risk factor in the development of suicidal behaviour. It will be proposed that there may be a link between family adversity, social support and suicidal behaviour. It will be further argued that if the family environment is characterised by poor quality interactions, conflict and adversity, then the likelihood of that family unit being available to provide support of a helpful nature would be minimal or nonexistent. It is proposed then that an implication of the relationship between family adversity (including conflict and discord) and suicidal behaviour may be that there is evidence for a relationship between social support and suicidal behaviour. Moreover, it will be argued that there is a relationship between family environment and suicidal behaviour such that the more severe the family conflict, discord and adversity, the more severe the suicidal behaviour exhibited by the young person.

In the study of suicide, it is essential for investigators to distinguish between those who attempt to harm themselves and those who have thoughts of harming themselves. This distinction is important in order to determine if these groups share any
similarities or differences with respect to risk factors (Berman & Jobes, 1991; Stillion, McDowell & May, 1989). It has been argued that these groups are part of an overlapping population (Dubow, Kausch, Blum, Reed & Bush, 1989). It will be shown that studies indicate that there is clear evidence for demonstrating that attempters often experience ideation. However, it will be shown that demonstrating whether ideators do in fact become attempters is difficult and has not been adequately addressed in the research on suicidal behaviour in adolescents.

Suicidal ideators are those individuals who have cognitions about wanting to die. Reynolds and Mazza (1994) state that suicidal ideation is the “domain of thought and ideas about death, suicide, and serious self-injurious behaviour” (p.528). Suicidal ideation can range from general cognitions about death to more specific thoughts about killing oneself (where, when and why). In contrast, suicide attempters have both the intent to die, as well as sufficient lethality in method use to accomplish that intent, but either fail or are intervened with and rescued (Reynolds & Mazza, 1994). This concept represents “a broad domain of self-injurious behaviour that involved some degree of intentionality” (Reynolds & Mazza, 1994, p.528).

Andrews and Lewinsohn (1992) provide evidence for the notion that ideators and attempters are part of an overlapping population. They found that the majority of attempters had at some point also experienced suicidal ideation. They studied the prevalence of suicide attempts and ideation, as well as the co-occurrence of attempts with psychiatric disorders in a community sample of 1,710 older adolescents. Structured interviews using rigorous diagnostic criteria were conducted in two annual
assessments of the participants. The reported lifetime prevalence of attempts was 7.1% and ideation was 21.1%, with almost 90% of those who attempted also reporting presence of suicidal ideation. Suicide attempts occurred in conjunction with depressive disorders, substance use disorders and disruptive behaviour disorders but not with panic disorders. Overall, the results indicate that risk factors for an attempt are the following: being female, from a home without a father, poor education of the father, previous attempts, suicidal ideation and mental disorders (Andrews & Lewinsohn, 1992).

Andrews and Lewinsohn (1992) argue that their findings indicate that attempters and ideators are part of an overlapping population. It makes logical sense that attempters would experience ideation at some point, since contemplation commonly occurs prior to the act itself. However, this does not imply that ideators then go on to become attempters. It is critical to point out that Andrews and Lewinsohn (1992) demonstrate that there is a relationship between attempting and ideating, with ideating being a precursor to the actual attempt.

Despite Andrews and Lewinsohn’s strong efforts to operationalise their variables, their study lacks an ability to generalise to other populations, such as those adolescents not in high school (e.g., incarcerated, hospitalised) or from other ethnic communities. The data indicate that suicidal ideation and attempts may be part of an overlapping distribution, as many first time attempters experienced suicidal ideation before their first attempt (Andrews & Lewinsohn, 1992). The study supports the notion that attempting may be a more severe manifestation of suicidal ideation. The
study also demonstrates the difficulty associated with studying these types of groups and the need for researchers to clearly define these samples in their studies. Researchers attempting to study the differences between those who attempt and ideate need to openly acknowledge that these groups overlap and any attempt to differentiate the groups will always be met with this limitation.

Similar to Andrews and Lewinsohn (1992), Lewinsohn, Rohde and Seeley (1994) found that those adolescents who attempted suicide also reported either having experienced or that they were currently experiencing suicidal ideation. They studied a plethora of psychosocial risk factors for making a suicide attempt in a sample of 1,508 high school students aged 14-18 years. Of the 1,508 students, 26 had made an attempt during the year preceding entry into the study. The researchers found that the strongest predictors of future attempt were history of past attempt, current ideation and depression, recent attempt by a friend, low self-esteem and having been born to a teenage mother (Lewinsohn et al., 1994). Again, this study supports the idea that attempting is a more severe manifestation of ideation and that ideating, in most cases, precedes attempting.

A major limitation of the Lewinsohn et al. (1994) study is the exclusive reliance on adolescent self-report. As a result, the measure of attempts is potentially vulnerable to over or underreporting biases, particularly when the adolescents were questioned directly about whether they had ever attempted suicide or thought about killing themselves. The Lewinsohn et al. (1994) study was also unable to determine whether the predictors for repeat attempters were different from those for first time attempters.
due to the sample of attempters being quite small. This study is nevertheless critical in
demonstrating that there are varying levels of suicidal behaviour, and in raising the
interesting question that there may also be within-group differences, particularly for
those who attempt (e.g., first time attempters versus repeated attempters).

Pelkonen, Marttunen, Pulkkinen, Laippala and Aro (1997) also found differences
between attempters and ideators and their findings further support the need to clearly
define these two groups. They utilised a sample of 260 adolescent outpatients aged
12-22 years, with 110 being classified as suicidal and the remainder being classified
as non-suicidal. The suicidal individuals were then further classified as either ideators
or attempters. Information on suicidal ideation, suicide attempts, psychiatric
diagnoses and other related factors (e.g., psychosocial functioning) was collected
prospectively during their treatment. Overall, it was found that mood disorder,
previous psychiatric treatment and low levels of psychosocial functioning at treatment
entry were associated with suicide attempts and ideation for both sexes compared to
non-suicidal subjects. More specifically though, they found that in comparison to
ideators, attempters showed lower levels of psychosocial functioning and higher rates
of risk factors (such as psychopathology). Pelkonen et al. (1997) concluded that their
results support the view that suicidal ideation and suicide attempts can be viewed as
(respectively) “milder and more severe manifestations of the same phenomenon”
(p.105). This study demonstrates that attempters and ideators share some similar risk
factors (e.g., psychopathology and psychosocial functioning), but that attempters
experience these factors to a greater degree and severity. Perhaps attempters go
beyond simply ideating because they experience higher rates of psychopathology and are exposed to a greater degree of dysfunction.

Often, in clinical populations, one will find that suicide attempters are more often than not also suicide ideators. With respect to this population, it is not unusual for attempters to oscillate between ideating and attempting. Garrison, Jackson, Addy, McKeown and Waller (1991), for example, found in their sample of young adolescents (12-14 years of age) that all of the attempters were also ideators. This study therefore supports other research which has shown that attempters have generally experienced some form of ideation whether it be past or present (e.g., Andrews & Lewinsohn, 1992; Lewinsohn et al., 1994). It is interesting to note that of the research reviewed thus far there appears to be no indication as to whether ideators necessarily become attempters.

The point that attempters and ideators may be part of an overlapping population was well illustrated in a study by Pearce and Martin (1994). Using a sample of 156 male and 151 female students aged 14-17 years attending one randomly chosen metropolitan state high school in North America, and using several psychometric instruments, they found that suicidal ideation, plans, threats and deliberate self-harm were associated with suicide attempts. Again, this study is valuable in that it demonstrates there is a relationship between ideating and attempting. Based on this study by Pearce and Martin (1994) and the previously reviewed studies by Andrews and Lewinsohn (1992), Garrison et al. (1991), Lewinsohn, Rohde and Seeley (1994), Pelkonen et al. (1997), it can be argued that attempters must experience ideation prior
to their attempt (i.e., the thought must naturally occur before the action). However, those individuals who ideate do not necessarily attempt. Those persons who repeatedly attempt would ideate more often than those who are first-time attempters largely because they are engaging in the behaviour more frequently. In addition, it has been demonstrated that first-time attempters are more likely to become repeat attempters (Lewinsohn et al., 1994). Incorporating these arguments and the arguments proposed by Kosky, Silburn and Zubrick (1990), it seems logical to conclude that there is evidence to show that attempters and ideators are part of “the same at-risk population” (Kosky et al., 1990, p.41).

Attempts have been made to examine whether ideators and attempters differ with respect to family environment and psychopathology. As will be demonstrated, these attempts are important in that they (a) support the need to clearly define these groups; and (b) provide support for a link between family environment, availability of social support and suicidal behaviour. Kosky et al. (1990) examined whether children and adolescents with suicidal ideation could be distinguished from children who attempt, on the basis of clinical symptoms and family environment. From a total of 2,181 consecutive referrals to a child outpatient psychiatry service, 258 young persons who had indicated suicidal ideation were compared with 82 young persons who had attempted suicide. Kosky et al. were unable to differentiate children with suicidal ideation from those who attempted on the basis of clinical symptoms alone. Both groups experienced similar high levels of symptoms of depression, anxiety, sleep disorder and irritability. Conduct disorders were less common in both groups, but 22% of the attempters abused illicit drugs or alcohol. The only difference found was
that family discord seemed to increase the likelihood of a suicide attempt. Kosky et al. (1990) conclude that "demographic and symptom comparisons provide empirical evidence suggesting that children who attempt suicide and ideate are part of the same at-risk population" (p. 41). Although this conclusion is correct, it needs to be interpreted with some caution, particularly because the sample studied was an outpatient psychiatric population, thereby limiting the ability to generalise. Kosky et al.'s findings are important in that they demonstrate that family discord is a risk factor which clearly can be used to differentiate between attempters and ideators. This finding could actually play a valuable role in determining therapeutic and treatment plans for these groups (e.g., intensive family therapy for those who attempt, to address the family discord). It would be interesting to further study whether addressing discord in the therapeutic setting would have any beneficial impact on reducing future risk of self-harm.

There is an added dimension to this study in that Kosky et al.'s results suggest that attempters are exposed to more severe forms of familial stress and discord than those who ideate only. Perhaps exposure to more severe forms of discord partially accounts for why attempters take their behaviour one step beyond simply ideating about suicide. In addition, this study raises an interesting question about the extent to which family environment may or may not be suitable in providing helpful or positive support to the at-risk individual. For instance, the likelihood of a family unit being available for provision of helpful or positive support will be significantly reduced if there is presence of family discord or stress. Although it is difficult to determine the exact direction of the relationship between familial stress and discord and suicidal
behaviour from these findings, they do suggest that more severe family stress and
discord is associated with more severe manifestations of suicidal behaviour. They also
indicate the need to clearly operationalise different levels of suicidal behaviour.

Unlike Kosky et al. (1990), other researchers have found differences between
attempters and ideators with respect to clinical symptoms. Drawing on data from a 16-
year longitudinal study of a birth cohort of young New Zealanders, Fergusson and
Lynskey (1995b) compared those who thought about self-harm with those who had
attempted suicide. Information was gathered on suicide attempts, suicidal ideation,
psychiatric diagnoses, adjustment problems and childhood factors. Childhood factors
included such measures as the family's socio-economic status, marital stability of
parents, childhood stability, parental alcohol/drug abuse and quality of mother-child
interactions. It was found that 12% of the birth cohort reported suicidal ideation
before the age of 16 years and 3% reported attempting suicide. Those persons who
had attempted suicide had higher rates of psychopathology and adjustment problems
and a greater exposure to a negative family environment compared with suicidal
ideators. Fergusson and Lynskey (1995b) show that those who attempt report a
greater degree of psychosocial risk factors (including psychopathology and negative
family environments) than those who report ideation only.

While Fergusson and Lynskey (1995b) challenge the findings of Kosky et al. (1990)
by demonstrating that the groups do in fact differ on clinical symptomatology, they
simultaneously confirm that attempters are exposed to more severe adverse family
circumstances. Similar to Kosky et al., the implication of this study is that a negative
family environment may mean that the family itself is not available to provide support or a healthy context in which the adolescent can grow and be nurtured.

The research on suicide attempters and ideators is valuable as it adds to professional understandings of what constitutes a risk for future attempts. In fine-tuning knowledge about suicide research, it is essential for investigators to clearly operationalise variables, particularly the variable of suicidal behaviour, whether it is attempters or ideators in a given sample. Researchers need to acknowledge in their research on suicidal behaviour that there is support for the fact that these populations overlap. Research indicates that ideators and attempters show similarities and differences in their relationship to various risk factors, and that their behaviour may be manifestations of the same phenomenon (e.g., Dubow et al., 1989; Kosky et al., 1990; Pelkonen et al., 1997). In fact, studies show that attempters tend to come from backgrounds characterised by greater family adversity compared to ideators (Fergusson & Lynskey, 1995b; Kosky et al., 1990). It is proposed that there may be a possible link between family adversity, social support and suicidal behaviour. For example, if the family environment is characterised by poor quality interactions, conflict and adversity, then the likelihood of that family unit being available to provide support would be minimal or nonexistent. This relationship, not directly tested but rather an implication of previous studies, is the first step in the development of the proposed social support model for the present study. The next section will examine some of the more specific research on family conflict and discuss how this risk factor relates to the availability of social support for suicidal adolescents.
2.5 Family Conflict, Social Support and Suicide Research

Several studies have explored the relationship of family conflict, discord and adversity to availability of social support in suicidal adolescents. The findings from these studies can be summarised as follows (see Table 2):

1. Suicidal adolescents tend to come from backgrounds characterised by childhood adversity – for example, parental separation, poor parental relationships, violent parental behaviour, inadequate parenting, family communication problems and abuse (Beautrais, Joyce & Mulder, 1996), family conflict (Brent, Perper, Moritz, Liotus, Schweers, Balach & Roth, 1994; Hurd, Wooding & Noller, 1999), family discord (Campbell et al., 1993; Kosky et al. 1990) and family relationship difficulties (Hollis, 1996).

2. Risk of suicide increases with increased exposure to the variables of childhood adversity, conflict and discord (Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993).

The previous cited findings suggest a link between family conflict, discord and adverse childhood circumstances, and suicidal behaviour. The presence of family relationship difficulties, conflict and discord implies that the possibility of these relationships being available for nurturance and support is minimal. However, this finding is an implication and more direct measurement of this relationship would be necessary in order to draw any conclusions with confidence. These findings nevertheless point to the importance of family support, and in turn the absence or
Table 2

Summary of Study Findings – Relationship between Family Conflict and Availability of Social Support to Suicide Research

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Variables</th>
<th>Measures</th>
<th>Results</th>
<th>Limitations/Gaps</th>
<th>Suicide Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautrais, Joyce and Mulder (1996)</td>
<td>129 young people who had made a serious suicide attempt (13-24 yrs) and 153 randomly selected controls.</td>
<td>Childhood adversity – parental separation, poor parental relationships, parental violent behaviour, physical/sexual abuse, alcohol problems and imprisonment, foster care and parental care characteristics.</td>
<td>Parental Bonding Instrument and all other questions were asked in an interview format.</td>
<td>Risk of serious suicide attempt among young people increased with extent of exposure to childhood adversity, social disadvantage and psychiatric morbidity with each of these factors making independent contributions to risk of serious suicide attempt.</td>
<td>1. Retrospective – under/over reporting bias. 2. Authors assume that an increase in conflict at home means that there is poor support within the family environment.</td>
<td>Examined only those subjects who had made a medically serious suicide attempt (defined as being hospitalised for more than 24 hours and in which specific treatment was required).</td>
</tr>
<tr>
<td>Brent, Peper, Moritz, Liotus, Schweers, Balach and Roth (1994)</td>
<td>67 suicidal adolescent completers and 67 matched controls.</td>
<td>Family constellation (structure), familial stressors (e.g., abuse of child, parent-child conflict, loss and separation, residential instability) and familial loading for psychopathology.</td>
<td>Constellation was measured using a standardised demographic instrument. Family stressors was measured by using a standardised interview format about stressful life events. Family history of psychopathology was measured by using the Family History Research Diagnostic Criteria.</td>
<td>They found that suicide completers were less likely to have lived with both biological parents, and were more likely to be exposed to stressors such as parent-child discord, physical abuse and residential instability. Family history of both substance abuse and depression and lifetime history of parent-child discord were most closely associated with adolescent suicide.</td>
<td>1. Case-control study which only allows conclusions about associations and not causality. 2. Used a family history method rather than direct interview. 3. Lack of detailed assessment of family environment. 4. Retrospective design - over or underreporting.</td>
<td>Only families of adolescents aged 19 and under who received a definite verdict of suicide were identified for the study.</td>
</tr>
<tr>
<td>Study</td>
<td>Sample</td>
<td>Variables</td>
<td>Measures</td>
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<td>Suicide Measure</td>
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<td>Campbell, Milling, Laughlin and Bush (1993)</td>
<td>43 preadolescent (7-11 yrs) psychiatric inpatients and their parents.</td>
<td>Perceived family climate as defined by the Family Environment Scale (FES) (10 dimensions such as conflict, cohesiveness etc.).</td>
<td>Family Environment Scale (FES)</td>
<td>Results showed that suicidal behaviour tended to be associated with greater family conflict and with less family organisation, cohesion and achievement orientation.</td>
<td>1. Potential impact of a third variable as they did not control for depression. 2. Inferential definition from measurement. 3. Imply that an increase in family conflict means a lack or loss of support.</td>
<td>Suicidal Ideation Questionnaire.</td>
</tr>
<tr>
<td>Hurd, Wooding and Noller (1999)</td>
<td>Control group of nondepressed adolescents (n=42), a clinical control group (n=24) and a self-harming group (n=49) aged 13-18 years.</td>
<td>Dependent measures used to assess parent-child relationships with mothers and fathers: quality of the relationship and amount of communication and conflict.</td>
<td>Content analysis using a taped interview.</td>
<td>Self-harmers experienced the least satisfactory relationships with their parents, and more conflict with their mothers than the other groups.</td>
<td>1. Cross-sectional design prohibits an analysis of causal relationships. 2. Sample prevents generalisation as participants were Caucasian working-class. 3. Reliance on open-ended self-disclosure via interview therefore could be reporting biases present.</td>
<td>Children's Depression Inventory (CDI) was used as a screening tool for the two control groups. The self-harm group comprised of participants who engaged in at least one self-harm attempt in the last 6 months.</td>
</tr>
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</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Variables</th>
<th>Measures</th>
<th>Results</th>
<th>Limitations</th>
<th>Suicide Measure</th>
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</thead>
<tbody>
<tr>
<td>Hollis (1996)</td>
<td>284 cases of suicidal behaviour and 3,054 nonsuicidal controls</td>
<td>Well conceptualised variables including familial lack of warmth, family</td>
<td>Variables chosen were drawn from the family relationship and psychosocial</td>
<td>Although depression was the largest single risk factor for teenage suicidal</td>
<td>1. The researchers group all suicidal behaviour together, when in fact these</td>
<td>Manual recording of presence of suicidal ideas, threats or attempts.</td>
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<td>discord, disturbed mother/father-child relationships, inadequate</td>
<td>variables as coded on the Maudsley “item sheets” record review.</td>
<td>suicidal behaviour, family relationship difficulties still made a</td>
<td>groups should be treated as separate.</td>
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<td>parenting, inadequate family communication, poor peer relationships,</td>
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<td>significant contribution independent to this risk.</td>
<td>2. Do not provide a definition of suicidal behaviour.</td>
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<td></td>
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<td>stress at school and sexual maturity.</td>
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<td>3. There may be more direct ways of measuring the relationship of family</td>
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<tr>
<td>Kosky, Silburn and Zubrick (1990)</td>
<td>258 young persons who exhibited suicidal ideation and 82 who attempted</td>
<td>Perception of family conflict and discord.</td>
<td>Record review using data forms from Maudsley and Royal Hospitals. The</td>
<td>Suicide attempts were more likely to be associated with chronic family</td>
<td>1. Lack of detailed description of method and no attempt made to define</td>
<td>Clear conceptualisation of attempt and ideation and clinicians used these</td>
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<td></td>
<td>forms were revised though to be applicable for this study based in</td>
<td>discord and substance abuse.</td>
<td>variables of interest.</td>
<td>definitions to assign patients to groups.</td>
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<td>Australia.</td>
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<td>2. Inferential conclusion with respect to family discord in some way</td>
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<td>reflecting a lack or loss of social support within the family.</td>
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minimal presence of family discord and conflict, in fostering healthy adolescent
development.

Frey and Rothlisberger (1996) studied a representative sample of 141 healthy
adolescents and administered a revised version of the Mannheim Interview on Social
Support (MISU). The MISU measures the number, type, perceived adequacy
(satisfaction) and quality of a person’s social relationships. The authors found that:
(a) adolescents turn to their families rather than to their peers for a wide range of
support both in day to day matters, as well as in emergency matters; and (b) that
friends serve a more protective role (social integration), whereas families serve a
more stress-buffering role. These findings suggest that healthy adolescent
development will be encouraged if support is available within the family unit.
However, if there is apparent discord and conflict present in the family environment,
then it would be expected that this would hinder the development of a healthy
adolescent and possibly encourage maladaptive coping patterns (such as suicidal
behaviour).

A study by Rubenstein, Halton, Kasten, Rubin and Stechler (1998) further supports
the notion that family cohesiveness and family support can help to alleviate suicidal
risk. As Durkheim (1951) stated in his well-known study on suicide, the less
integrated an individual is into his/her family unit, the more likely he/she will be to
exhibit suicidal behaviour. Rubenstein et al. (1998) found that recent suicidal
behaviour was reported on a questionnaire by 14% of 272 high school students. They
found that adolescents whose families were emotionally involved, spent time together,
and had common interests were less likely to be suicidal. Risk of suicide appeared to be less for those adolescents who reported belonging to intact families versus nonintact families (Rubenstein et al., 1998). A likely explanation for this result could be that adolescents in nonintact families experience their families as being less cohesive and less available for support. This finding relates to the earlier work cited (e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Hollis, 1996; Kosky et al., 1990) in that it demonstrates the importance that presence and availability of support plays in reducing suicide risk.

The preceding discussion demonstrates that there is a link between family conflict, social support and suicidality. It also illustrates the importance that presence of support, as long as it is interpreted as being of a positive and helpful nature, can play in the healthy development of an adolescent. Besides the importance that these variables have for suicide research and practice, the research findings to date seem to have some limitations that require attention in order to demonstrate the need for the development of a social support model.

Of the studies cited, that completed by Kosky et al. (1990) is the only one which clearly examines the difference between suicidal ideators and attempters. As demonstrated previously, research needs to clearly define the differences between those individuals who ideate and attempt because studies have shown that those individuals who attempt suicide tend to be exposed to a greater level of risk factors (e.g., family conflict, psychopathology) than those individuals who ideate (see e.g., Dubow et al., 1989; Fergusson & Lynskey, 1995b; Kosky et al., 1990; Pearce &
Martin, 1994; Pelkonen et al., 1997). Hollis (1996) confuses the matter by operationalising suicidal behaviour in terms of the presence of both ideation and/or attempts. This is a limitation because it has been shown that these two groups, despite sharing similarities, are also quite different.

This discussion demonstrated that suicidal adolescents tend to experience some degree of family conflict, adversity and/or discord and that risk of self-harm increased with increased exposure to these factors (see Table 2). Based on the research reviewed in Table 2, it was argued that family conflict, adversity and discord might create a situation in which the availability of support is either lacking or limited. The next step would be to determine whether adolescents perceive the support as being limited or lacking. It would also be critical to determine, if there is support available to them, whether they perceive it as helpful or not.

2.6 The Relationship Between Perceived Social Support and Youth Suicide

Several studies have directly examined the perceived satisfaction with available support received from friends and family in suicidal adolescents. Overall, these studies show that (see Table 3):

1. Adolescents at greater risk of self-harm were less satisfied with the quality of support received from friends and family (e.g., D’Attilio et al., 1992; De Man & Leduc, 1995; De Man et al., 1993; Eskin, 1995; Morano et al., 1993; Whatley & Clopton, 1992).
### Table 3.

**Summary of Study Findings – Relationship between Perceived Level of Social Support and Suicidality.**

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Social Support Definition</th>
<th>Social Support Measurement</th>
<th>Results</th>
<th>Limitations</th>
<th>Suicide Measure</th>
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</thead>
<tbody>
<tr>
<td>D'Attilio, Campbell, Lubold, Jacobson and Richard (1992)</td>
<td>80 adolescents from 16-20 years (United States).</td>
<td>Social support refers to the quantity and quality of experienced social support.</td>
<td>Social Support Questionnaire (SSQ)</td>
<td>1. Social support variables accounted for over 52% of the variance in suicide potential. 2. Adolescents at greater risk for suicide were less satisfied with the quality of their social support.</td>
<td>1. SSQ limits appraisals to the domain of satisfaction and items appear to oversample contexts for emotional support without focusing on this mode exclusively. 2. They obtain an overall score of social support and fail to distinguish between the different modes of support.</td>
<td>Suicide Probability Scale.</td>
</tr>
<tr>
<td>DeMan and Leduc (1995)</td>
<td>129 males and 117 females 12-18 years (Canadian).</td>
<td>Level of support, and satisfaction with received support.</td>
<td>Social Support Questionnaire (SSQ)</td>
<td>1. They found that there was a relationship between suicidal ideation and the variables of gender, self-esteem, locus of control, depression, drug use, stress, perception of health, family status, academic performance and social support. 2. Multiple regression analyses revealed that depression and alcohol use were the best independent predictors. 3. They showed that the removal of the effect of</td>
<td>1. A lack of clear definition of what constitutes social support. 2. SSQ again has the problem of being largely unidimensional with respect to the mode of support known as emotional. 3. Confounding variable of depression.</td>
<td>19 item scale for Suicidal Ideation.</td>
</tr>
<tr>
<td>Study</td>
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<td>Social Support Measurement</td>
<td>Results</td>
<td>Limitations</td>
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<td>DeMan and Leduc (1995)</td>
<td>272 French-Canadian adolescent males and 286 females.</td>
<td>Social support defined as the people important to rely on for assistance and also included exploring satisfaction within those relationships.</td>
<td>Adapted questionnaire with items about social support network and satisfaction with social support.</td>
<td>depression resulted in a significant loss of correlation between suicidal ideation and the other variables except for alcohol use, drug use and health satisfaction.</td>
<td>1. No reported reliability or validity of the instrument in question. 2. No distinction made between what types of support they are examining. 3. It does not provide an adequate definition of what constitutes social support. 4. The study does not control for depression.</td>
<td>Scale for Suicidal Ideation.</td>
</tr>
<tr>
<td>DeMan, Leduc and Labreche-Gauthier (1993)</td>
<td>61 Swedish and 71 Turkish adolescents who made a suicide attempt.</td>
<td>Adolescents perception of whether needs for support, information and feedback are fulfilled by friends/family.</td>
<td>Perceived Social Support From Friends and Family (PSS-FR; PSS-FA).</td>
<td>Significant predictors for risk – a) Swedish – low perceived family and peer support, previous attempts, female, previous psychiatric contact, low positive assertion skills and a small number of friends; b) Turkish – low perceived family and peer support, previous attempts, suicide attempts in the family and previous psychiatric contact.</td>
<td>1. No definition of support offered. 2. It does not distinguish between the different modes of support. 3. PSS questionnaire emphasises the individual's perception of emotional support and feedback only.</td>
<td>Suicide Probability Scale.</td>
</tr>
<tr>
<td>Study</td>
<td>Sample</td>
<td>Social Support Definition</td>
<td>Social Support Measurement</td>
<td>Results</td>
<td>Limitations</td>
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<tr>
<td>Frey and Rothlisberger</td>
<td>141 healthy Swiss adolescents</td>
<td>Describes social support as the provisions obtained through social relationships which are largely determined by their perceived adequacy.</td>
<td>Revised version of Mannheim Interview on Social Support (MISU).</td>
<td>1. Adolescents largely turn to their families rather than peers for a wider range of supports both in day to day matters, as well as during times of crises. 2. Peer group tended to constitute an important source of emotional support in everyday life.</td>
<td>No significant limitations.</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>Morano, Cisler and Lemerond</td>
<td>20 adolescent inpatient attempters and 20 non-attempters – both matched on depression scores (United States)</td>
<td>Social support defined as both the number of others available for support, as well as the perceived degree of satisfaction with the available support.</td>
<td>Sarason Social Support Questionnaire (SSQ).</td>
<td>1. Data showed that loss and low family support were the best predictors of an adolescent's suicide attempt. 2. Subjects who experienced a loss and perceived that they had relatively little family support were highly likely to have attempted suicide.</td>
<td>1. SSQ measure – assesses satisfaction only and in respect of primarily emotional support. 2. Overall measure of support thereby obscuring the other modes of support. 3. Poor conceptualisation of social support in that no efforts are made to clarify how quantity and quality are different and how they interact under the rubric of social support.</td>
<td>Suicide Ideation Questionnaire.</td>
</tr>
<tr>
<td>Tousignant and Hanigan</td>
<td>24 suicidal and nonsuicidal French-Canadian adolescents.</td>
<td>Network structure and crisis support. These researchers were also interested in the subjects' perceptions of the received support.</td>
<td>Created their own assessment tool based on Self-Evaluation and Social Support Schedule Semi-Structured Interview.</td>
<td>1. Suicidal group named fewer important persons in their kinship network and had more conflicts with this network than did the nonsuicidal group. 2. This difference was not found in the nonkinship network. 3. Both groups were generally satisfied with the support received.</td>
<td>1. Inferential definition based on questionnaire. 2. There is a gap in that the researchers do not compare the different types of support. They do not adequately conceptualise social support. 3. Weak suicidality measure.</td>
<td>Respondents who reported a suicide attempt or had serious suicidal ideation during the last year were defined as suicidal.</td>
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<tr>
<td>Study</td>
<td>Sample</td>
<td>Social Support Definition</td>
<td>Social Support Measurement</td>
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<tr>
<td>Whatley and Clopton (1992)</td>
<td>305 university students - 90 male and 215 female ages 18-24 yrs (United States).</td>
<td>Perceived availability of potential social resources and self-appraisal of that received support.</td>
<td>Interpersonal Support Evaluation List (ISEL).</td>
<td>1. Social support was significantly correlated with suicidal ideation but did not contribute to the variation in ideation scores beyond the joint contribution of scores on the Beck Depression Inventory and scores on the Hopelessness scale. 2. This suggests a stronger relationship might be found between social support and ideation if they had looked at the different aspects of social support. 3. These authors stress the importance and need for others to examine the different aspects of social support instead of using an overall measure.</td>
<td>1. High reliability, but no reported validity for the ISEL in this study. 2. No clear model or conceptualisation of social support. 3. Confounding variable of depression.</td>
<td>Scale for Suicidal Ideation.</td>
</tr>
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</table>
2. Suicidal adolescents tend to name few people as important persons in their kinship network and report more conflicts with this group compared to nonsuicidal adolescents (Tousignant & Hanigan, 1993).

The studies cited appear to demonstrate that the lack or loss of social support is a critical factor in heightening suicide risk. However, as reported by De Man and Leduc (1995) and Whatley and Clopton (1992), this finding is no longer significant once the effects of depression are removed. Aside from the previous two studies, and the Morano et al. (1993) study, none of the other studies mentioned in this review controlled for depression (see Table 3). It could be that social support alone is not enough to determine risk, but that it is the complex interplay between a variety of factors which increases the risk of suicide (Beautrais, 1998; Berman & Jobes, 1991).

Another limitation in the previously reviewed research is that many of the studies fail to distinguish between responses from attempters and ideators. This is important as Dubow et al. (1989) report that suicide attempters have lower levels of family support compared to suicide ideators. It was also argued in section 2.4 that despite some overlap (i.e., attempters ideate but ideators do not always attempt), attempters and ideators should be treated as nonidentical populations since they experience risk factors to different degrees (see Kosky et al., 1990).

A final limitation of the studies reviewed is that there is no research directly measuring supportive behaviour itself (the act), rather the research focuses exclusively on support appraisal. This appears to be ironic considering that there are a
wide range of supportive behaviour measurements available (Vaux, 1988). There
seem to be two noticeable gaps when applying this research to the previously
discussed social support definitions: (a) there would seem to be no research measuring
the relationship between supportive behaviour (act) and suicidality in youth, and
(b) there is limited research examining the differences between attempters and
ideators with respect to social support itself.

Despite these limitations, research findings with respect to perceived social support
are valuable because they demonstrate that suicidal adolescents and nonsuicidal
adolescents perceive support differently. In addition, findings demonstrate that the
less satisfaction associated with support, the more likely an adolescent is to be at risk
of suicide (i.e., less satisfaction, greater risk) (see Table 3). As discussed in Section
2.5, research findings relating to family conflict, discord and adversity suggest that
the presence of these factors might limit the availability of social support to the
adolescent. A further possible implication of the findings on perceived social support
and suicidality is that presence of adversity, discord and conflict may also result in the
provision of unhelpful support and/or support that is perceived by the adolescent as
being unsatisfying.

2.7 Risk-Level Assessment and Clinical Decisions for Safety

It has been proposed that understanding the role of family conflict, discord and
adversity in suicidal behaviour may be important in determining therapeutic treatment
plans for at-risk adolescents. It would need to be further investigated though in order
to determine to whether family therapy treatment goals (e.g., communicating more
effectively with one another) may assist in reducing risk of suicide (indirectly or
directly). It would be interesting to also determine whether the presence of family
conflict, discord or adversity has a role in determining the types of risk-level decisions
made by clinicians and the types of safety interventions (e.g., hospitalisation)
recommended for their clients. More specifically, examining the role that support
appraisal (whether it be negative or positive) may play in risk-level assessment and
safety intervention recommendations (e.g., hospitalisation) could have important
implications for clinical practice with suicidal adolescents. The following discussion
will focus on the clinicians’ appraisal of social support in risk-level assessment and
safety planning. It is important to note that the focus of clinicians’ appraisal needs to
be differentiated from the previous discussion (Section 2.6) which examined the
adolescent’s perception of social support (whether it was satisfactory or not). Another
important point to note here is that the following discussion also focuses on the
relationship between risk-level assessment and safety planning for suicidal
adolescents, since it has been proposed that they are interrelated. That is, the risk-level
assessment (low, medium or high risk) and the types of risk factors present will
largely determine the nature of the safety plan and recommendations necessary to
ensure continued safety of a suicidal adolescent (Berman & Jobes, 1991).

In assessing suicide risk, professionals need to take a multi-faceted, social-
psychological approach and be on the alert for a number of different risk factors
outlined in the research. Bennan and Jobes (1991) have constructed a list of important items worth investigating, such as imminent risk, lethality and intent, predisposing conditions and precipitating factors (e.g., poor social support), psychopathology, compliance and coping skills. They suggest that the greater the number of risk factors identified in this checklist, the greater the likelihood of being at risk of future suicidal behaviour. In fact, Berman and Jobes (1991) have constructed a risk-level guide ranging from low, through to high risk. Similar to the research on suicide attempters and ideators, the work by Bennan and Jobes (1991) implies that there is a spectrum for suicide risk from low to high.

Sommers-Flanagan and Sommers-Flanagan (1995) present a more elaborate risk spectrum than that outlined by Berman and Jobes (1991). This risk classification is as follows:

2 The following is a list, although not exhaustive, of the known factors which put youth at-risk of suicidal behaviour: an adverse family environment (Adams, Overholser, & Lenhert, 1994; Beautrais, Joyce & Mulder, 1996; Carris, Sheeber & Howe, 1998; Hollis, 1996); an abusive or violent upbringing (Beautrais, Joyce, Mulder, et al., 1996; Brown, Cohen, Johnson & Smailes, 1999; Molnar, Kral, Booth & Watters, 1998); demographic factors (age, gender) (Coggan, 1997); poor social support (De Man & Leduc, 1995); family or individual stressors (relationship loss, grief) (Adams, Overholser & Spirito, 1994; McKeown, Garrison, Cuffe, Waller, Jackson & Addy, 1998); coming from a socially disadvantaged background (e.g., poor educational achievement, low socio-economic backgrounds) (Beautrais, Joyce & Mulder, 1998a); a lack or loss of social supports (Maris, 1997); low self-esteem (De Man & Leduc, 1995; Overholser, Adams, Lehert & Brinkman, 1995); a more external locus of control (De Man & Leduc, 1995); impulsivity (Kashden, Fremouw, Callahan & Franzen, 1993; McKeown et al., 1998); a negative perception of family relations (Overholser et al., 1995); a family and/or individual history of psychopathology (particularly if comorbid) (Apter & Freudenstein, 2000; Beautrais, Joyce, Mulder, et al., 1996; Beautrais, Joyce & Mulder, 1998c; Brent et al., 1993; Clark, 1998; Hollis, 1996; Johnson, Brent & Connolly, 1998; Kosky et al., 1990; Laederach, Fischer, Bowen & Ladame, 1999; Patton et al., 1997; Pfeffer, Klerman & Siefker, 1991; Pfeffer, Normandin & KaKaua, 1998); a history of past attempts (Roberts, Roberts & Chen, 1998); school problems and alcohol and drug abuse (Brent et al., 1993; Kosky et al., 1990); and biological deficiencies in the serotonin metabolite 5-HIAA (Shaffer & Piacentini, 1994). A more chronic and severe impairment in both environmental and biopsychosocial risk factors places an individual at greater risk of suicidal behaviour (Berman & Jobes, 1991; Moscicki, 1995).
(a) nonexistent = no suicidal ideation or plans; (b) mild = suicidal ideation but no specific or concrete plans – few risk factors are present; (c) moderate = suicide ideation and a general plan exists, but self-control is intact, there are several “reasons to live,” and the patient does not “intend to” commit suicide - some risk factors are present; (d) severe = suicide ideation is frequent and intense, suicide plan is specific, lethal, available, and there are few nearby helping resources. Self-control is questionable, but intent appears absent and there may be many risk factors present; (e) extreme = same as severe, but patient expresses a clear intent to commit suicide when the opportunity presents itself and there are usually many risk factors present. (p.45)

Despite some variations with respect to risk labels, these measures are important in that they act as a useful guideline for clinicians in their assessment of risk. As will be discussed, risk assessment is not an exact science and reaching a risk-level decision commonly involves the integration of both objective (standardised scales) and subjective (clinical interview) measures (Sommers-Flanagan & Sommers-Flanagan, 1995).

Stoelb and Chiriboga (1998) have also constructed a model that helps clinicians pinpoint various levels of risk. However, this model has not been empirically tested. Despite this limitation, the model does suggest the importance of considering a multitude of factors when assessing risk. Stoelb and Chiriboga (1998) propose four stages for risk assessment: Stage 1- Assessment of primary risk factors (e.g., affective disorders, previous attempt, hopelessness); Stage 2 – Assessment of ideation, intent
and plan; Stage 3 - Assessment of secondary risk factors (substance abuse, personality disorders); and Stage 4 - Assessment of situational risk factors (family functioning/history, support, life stressors, social relationships, exposure to suicidality, and homosexuality). With respect to suicidal behaviour, each person is unique (such that the factors which help to account for the risk of one person may be very different for another), although this model is still helpful in that it provides a guideline for clinicians and can help in organising the information obtained through an interview.

The point has been made that clinicians can only predict the risk of suicide and not the act of suicide as such (Motto, 1991). The prediction of risk can be carried out by both clinical (e.g., interview) and empirical means (e.g., standardised measurement) (see Havens, 1999; Sommers-Flanagan & Sommers-Flanagan, 1995; Yufit, 1989; Yufit & Bongar, 1992), with a focus on exploring suicidal thoughts and behaviours and the psychosocial dimensions of suicide risk (Clark, 1998). The dilemma is that clinicians must accept the fact that there is no avoiding subjectivity when estimating the risk of suicide (Jobes, 1995; Motto, 1991). This dilemma is largely because suicide assessment also involves a reliance on clinicians’ past experience and judgements in their work with suicidal clients.

Clinicians could benefit from the use of standardised scales when assessing suicide risk. There are several agreed-upon measures to assist in determining the risk-level of a suicidal client. Examples of such measures include the Suicide Probability Scale (SPS) (Tatman, Greene & Karr, 1993), the Inventory of Suicide Orientation (ISO)
(Piersma & Boes, 1997) and the Suicide Ideation Questionnaire (SIQ) (Reynolds, 1987). All three measures have been used with adolescent clinical populations.

The SPS consists of 36 Likert items with each item being measured on a scale from 1 (None or a little of the time) to 4 (Most or all of the time). In addition to an overall score, the SPS has four clinical subscales: Hopelessness, Suicidal Ideation, Negative Self-Evaluation and Hostility (Cull & Gill, 1982). The SPS was designed to be used in addition to the clinical interview (Range & Knott, 1997). However, difficulties in measuring risk have been reported for the SPS. It appears as if some items from the SPS may be more appropriate for use with an adult clientele (see e.g., item about money or financial status). In addition, the SPS fails to assess factors deemed significant in determining risk of self-harm in adolescents, such as previous suicide attempts, conduct disorder, substance abuse and reasons for living (Larzelere, Smith, Balenhorst & Kelly, 1996). It seems obvious to conclude that the use of an interview format examining the risk factors deemed important in determining risk of self-harm in adolescents could provide additional information to that supplied within the SPS, thereby assisting in making a more holistic risk-level assessment.

The advantage of the ISO and the SIQ is that they offer cut-off scores in order to help determine whether someone is at low, medium or high risk (Morano et al., 1993; Piersma & Boes, 1997). The SIQ has an adult form and a junior high form (12-14 year olds) (Reynolds, 1987). Despite strong reliability and validity, the SIQ seems to be less used in research than other instruments which could be due to the fact that fewer studies concentrate on younger adolescents. Range and Knott (1997) suggest that the
SIQ may be more useful as a screening tool rather than as a research instrument. Again, this discussion demonstrates that the SIQ needs to be used in conjunction with either additional suicide scales and/or an interview.

Other scales tend to use a Likert-type rating scale in determining risk-level, as illustrated by the SAD PERSONS Scale (Patterson, Dohn, Bird & Patterson, 1983). Similar to the SPS, the difficulty with the SAD PERSONS Scale is that some of the items are more appropriate for an adult population (i.e., the item inquiring about one’s spouse) and need to be revised if being used with adolescents. However, an obvious advantage of using rating scales is that they can be easily combined with a clinical interview in order to obtain additional information. The SAD PERSONS Scale was based on the principle demonstrated earlier that the more risk factors there are present, the higher the risk-level will be for any particular patient.

A final measurement used by clinicians in order to assist in making a decision about risk is a scale called the Children’s Global Assessment Scale (CGAS). The CGAS is useful for an overall measure of severity of disturbance and future risk to self. This scale ranges from 1, representing the most functionally impaired child, to 100, representing the healthiest. Scores above 70 on the CGAS are designated as indicating normal function. The scale has behaviourally-oriented descriptors at each anchor point that depict behaviours and life situations applicable to children 4-16 years of age (Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird & Aluwahlia, 1983). This scale has demonstrated good reliability and validity (Shaffer et al., 1983), and clinicians tend to
use it in conjunction with a more specific scale to assist in determining a person’s risk of future self-harm (Stelmachers & Sherman, 1992).

As outlined, risk is largely measured on a continuous scale from low to high. The prediction of suicide can never be exact, but clinicians can use their knowledge and experience in order to get as close as possible to the best estimate of future suicidal risk. It has been demonstrated that clinicians need to examine both social and psychological factors when assessing risk-level. It was argued that clinicians could benefit from using both standardised scales, as well as an interview in order to make a risk-level assessment. Clinicians are left with the difficult task of not knowing an exact formula to reach this decision, but rather need to equip themselves with some confidence in their subjective judgement. Among the identified risk factors, social support has been shown to be a significant factor in determining risk (Hollis, 1996; Maris, 1997) and differentiating those who attempt from those who ideate (Fergusson & Lynskey, 1995b; Kosky et al., 1990). Knowing that the adolescents’ positive appraisal of social support has a significant role in their healthy development (Frey & Rothlisberger, 1996) and that the adolescents’ negative appraisal of social support significantly increases their risk of suicide, it would appear that information collected by the clinician during a risk assessment interview could very well impact upon the risk-level decision and associated safety interventions for a suicidal adolescent. As will be evidenced in the following discussion, studies by Morrissey, Dicker, Abikoff, Alvir, De Marco and Koplewicz (1995) and Dicker, Morrissey, Abikoff, Alvir, Weissman, Grover and Koplewicz (1997) demonstrate that social support does in fact play a crucial role in both clinicians’ estimation of risk and associated safety
interventions selected (e.g., hospitalisation). In fact, the single most important factor for experienced child and adolescent clinicians in reaching their decision to hospitalise or not, is family support (Morrissey et al., 1995).

It is proposed that risk-level assessment and the process of recommending safety interventions are interrelated, since it has been argued that the risk-level (whether low, medium or high) will determine the type of interventions recommended by a clinician (Berman & Jobes, 1991). For example, a clinician would be more likely to recommend hospitalisation for a high risk suicidal patient than they would for a low risk suicidal patient. It will be shown how particular risk factors (social support), in combination with the risk-level assessment, play a critical role in determining the types of safety recommendations made by a clinician. This discussion will now look at the evidence for a relationship between social support, risk-level and safety interventions – the very essence of the proposed social support model.

Safety interventions are those actions deemed necessary in order to ensure continued safety of a patient and include such things as hospitalisation, provision of emergency contact numbers, provision of medication, regular scheduled appointments and referrals to child protection agencies (Rudd & Joiner, 1998). There appear to be two major studies which have been conducted on this topic, namely those by Morrissey et al. (1995) and Dicker et al. (1997). Both studies utilised a questionnaire containing 64 vignettes describing adolescent suicide attempts, with each vignette systematically varying six known variables related to lethality of attempt (e.g., gender, depression, conduct disorder/substance abuse, previous attempts, suicidal relative and family
supports). Respondents were asked to judge the appropriateness of hospitalisation for each vignette. Morrissey et al. (1995) utilised a sample of experienced child, adolescent and family clinicians and Dicker et al. (1997) employed a sample of resident psychiatric doctors.

Morrissey et al. (1995) found that experienced child and adolescent clinicians use known risk factors when making decisions to hospitalise suicidal adolescents. In addition, they found that family support was considered the most important factor in the decision to hospitalise. Also important, but to a lesser extent, in the decision to hospitalise was depression, conduct disorder and substance abuse, history of prior attempt and presence of a suicidal relative. This study demonstrates the priority that clinicians place upon support in determining risk-level and safety interventions. It makes logical sense that if a patient has poor social support, in addition to considering all other risk factors, this would place the patient at greater risk of suicidal behaviour and necessitate appropriate interventions involving the strengthening of the support system. As Frey and Rothlisberger (1993) demonstrated, positively appraised support can help to act as a buffer to the development of suicidal behaviour.

In contrast, Dicker et al. (1997) found that depression was the most important risk factor in the decision to hospitalise among resident psychiatric doctors. Although doctors considered family factors to be less important hierarchically than did the more experienced clinicians in the Morrissey et al. (1995) study, family support was still considered to be important in the overall decision to hospitalise. A likely explanation for this finding is that psychiatric trainees tend to place a higher priority on a
diagnosis of depression than they do on any other risk factor (e.g., family supports, previous attempts) (Dicker et al., 1997). An implication of these findings is that the nature of the sample (clinicians versus medical doctors) and their professional training may well influence the priority that they place upon particular risk factors in determining risk and safety interventions. The important point to note, however, is that regardless of the hierarchical order of the studied risk factors, family support still played a significant role in the decision to hospitalise. Again, this finding has important implications for the present study in that it suggests empirical evidence for a relationship between social support, risk-level and safety interventions.

A limitation of the research by Morrissey et al. (1995) and Dicker et al. (1997) is that these investigators fail to explore the many possibilities with respect to crisis intervention. The studies focus on hospitalisation and fail to explore the number of other options available to young persons, such as planning for the next appointment, time between assessment and appointment, phone contact, provision of emergency numbers, referral to child protection agencies and respite care (Rudd & Joiner, 1998). A study by Jay, Graham and Flowers (1989) did examine more particular measures, such as referrals and consultations, but failed by not appropriately conceptualising the variables of interest and by not establishing any reliability or validity for data collected.

Professionals are often left to grapple with considering both the availability of patients' support systems, and also the availability of community resources when making decisions about hospitalisation (Engleman, Jobes, Berman & Langbein,
Since social support can play a significant role in clinicians’ decisions to hospitalise a suicidal patient, the next step would be to look at exactly how social support influences both clinicians’ risk-level assessments and decisions for safety plans for those adolescents at risk of self-harm. In order to achieve this goal, a model, incorporating the aforementioned theory, must first be established.

2.8 Social Support, Risk-Level and Safety Interventions: Toward a New Conceptualisation

The following is a synthesis of the concepts introduced by social support theorists (House & Kahn, 1985; Pierce et al., 1996; Thompson, 1995; Vaux, 1988). The purpose of this synthesis is to present a clearer understanding of what social support means, how the process of social support occurs and to utilise the similarities and differences from their conceptualisations of social support in an effort to present a more comprehensive understanding of social support. Following this discussion, a model incorporating social support, risk-level and safety interventions is proposed in order to provide some context for the research questions and hypotheses associated with the present study.

Many people belong to a social network, which includes all individuals, and/or groups with whom people have social contact. A social support network is a subset of a social network and refers to the individuals/groups from whom people receive support and/or to whom they give support. The structural characteristics which help to define, in a measurable way, the type of relationships within our social networks include size, social embeddedness or frequency, dispersion or accessibility, stability and
extensivity (see Table 1). It is possible for the social network and social support network to change over time, during which individuals can be either more socially integrated or more socially isolated (Thompson, 1995).

Thompson (1995) argues that the social support network also has what are known as affiliative features. These include such things as valence, reciprocity, homogeneity, multiplexity, density, and perceived support (see Table 1 for definitions). Affiliative features, unlike structural features, refer to the meaning of network associates to the individual. In essence, these features emphasise the quality (versus the quantity) of the relationship to others, as well as the perception of the network associations (e.g., helpful or not helpful). Individuals turn to their social support network for what is known as supportive behaviour. Supportive behaviour involves a transaction and/or an exchange between two (or more) individuals. As discussed, there are many different types of supportive behaviour and the one chosen for this particular model is one that focuses primarily on emotional support. It was argued previously that emotional support adequately captures the meaning of social support because each type of social support is in some way associated with emotional support.

Within the behavioural exchange of support, there are two roles; that of recipient and that of provider. When a transaction of support occurs, it is thought that the provider generally has good intentions. However, the recipient may or may not perceive that behaviour as supportive depending upon the timing, amount and mode of supportive behaviour that occurs. For example, the social support network may change depending upon whether the supportive behaviour given and received is helpful or not.
helpful. If a recipient cannot elicit the necessary support in a given situation, then he/she is not likely to continue to include the provider in their social support network. In addition, if the provider cannot give the necessary form of support in any given situation, then the recipient is also not likely to continue to include this particular individual in their social support network (House & Kahn, 1985; Vaux, 1988).

The critical point to extract from this discussion is that social support is not a definable term in and of itself, but rather it is a superordinate term used to encompass interaction between a number of key concepts, namely social networks, supportive behaviour and subjective appraisals of support. These concepts, and the related research reviewed on social support and suicide, will be applied to assist in the development of a new social support model. The new model expands understanding of suicidal behaviour in that it incorporates the possible relationship which may exist between social support, risk-level assessments and safety interventions initiated by clinicians for suicidal adolescents.

The principles for the new model, derived from previous discussion on social support, are as follows. First, it was demonstrated that there was evidence for a range of suicidal behaviour from completing through to ideating (see Andrews & Lewinsohn, 1992; Lewinsohn et al., 1994; Pelkonen et al., 1997). It was argued that attempters often ideate, but that ideators do not necessarily attempt. Second, it was established that attempters reported greater exposure to family adversity, discord and conflict than ideators (Fergusson & Lynskey, 1995b; Kosky et al., 1990). Third, it was noted that presence of family adversity, discord and conflict could create situations in
which there is a lack/loss of social support and/or a perception of unhelpful support (as perceived by the adolescent). Fourth, it was demonstrated that social support is a well-established risk factor for suicidal behaviour in adolescents (see Tables 2 and 3). Finally, it was shown that social support (i.e., family support) has a significant role in affecting how clinicians make assessments of a client’s risk-level, and in turn, the necessary safety interventions in order to reduce risk (Dicker et al., 1997; Morrissey et al., 1995). For example, if there is a minimal specific social support network, as well as minimal supportive behaviour combined with negative appraisals of that support, then the clinician will probably be more likely to rate that client as being at a high risk-level. The reverse of this situation would probably result in the clinician rating the client at a lower risk-level. Of course, all other risk factors, such as psychopathology, would need to be taken into consideration when the decisions are made. If a person has few persons in his/her support network and minimal supportive behaviour, as well as a negative perception of that behaviour provided, then clinicians might concentrate upon safety interventions that focus primarily around building up that person’s support system (e.g., frequent sessions; regular telephone contact with their therapist etc.). Overall, if the support system is inadequate, this will impact on the clinicians’ risk-level assessments and recommended safety interventions for suicidal adolescents, as was demonstrated by Dicker et al. (1997) and Morrissey et al. (1995).

The new model further indicates that the existence and level of negative and positive emotional support will be related to future risk of suicide and the types of safety interventions selected by clinicians following acute assessment. The concept of
negative support integrates the research on family conflict and social support, encompasses the existence of dysfunctional, unhelpful and/or limited (unavailable or lacking) support, and can be defined as the presence of one or more of the following: people who abuse the young person (physical, emotional, sexual or neglect); people who the young person finds difficult to trust; people who communicate with the young person in a dysfunctional way (e.g., fights); people who will not listen to the young person’s problems or difficulties; people who cannot be relied on for help; and people who do not want to spend time with the young person. This definition was developed in reference to the descriptions of conflict, discord and adversity as utilised in the research on family conflict, social support and youth suicide (e.g., Beautrais, Joyce & Mulder, 1996; Campbell et al., 1993; Hollis, 1996; Kosky et al., 1990) and Sarason et al.’s (1983) Social Support Questionnaire (SSQ). The negative emotional support items chosen for this study were based on the items from the SSQ largely because the SSQ has demonstrated good reliability and validity (Sarason et al., 1983).

As discussed, a relationship between family conflict, discord and adversity and youth suicide was established (see Table 2). Establishing this relationship was critical in order to demonstrate that family discord, conflict and adversity might create situations in which support is perceived by the adolescent as being dysfunctional, unhelpful or limited (negative support). For example, as indicated previously, Beautrais, Joyce and Mulder (1996) found that suicidal adolescents tended to come from backgrounds characterised by childhood adversity (e.g., parental separation, poor parental relationships, parental violent behaviour, inadequate parenting, family communication problems and abuse). Other factors, such as family conflict (Brent et al., 1994; Hurd
et al., 1999), discord (Campbell et al., 1993) and family relationship difficulties (Hollis, 1996) were also found to be common in the backgrounds of suicidal adolescents. Interestingly, the contemporary research on adverse childhood experiences (ACE) (e.g., inclusion of circumstances such as psychological, sexual and/or emotional abuse, domestic violence, and living with other family members who have mental illness) (see for e.g., Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, Koss & Marks, 1998; Edwards, Anda, Nordenberg, Felitti, Williamson & Wright, 2001) and poor parental bonding (see for e.g., Parker, Roy, Wilhelm, Mitchell, Austin & Hadzi-Pavlovic, 1999; Parker, Roussos, Hadzi-Pavlovic, Wilhelm & Austin, 1997; Parker, Hadzi-Pavlovic, Greenwald & Weissman, 1995) extends the findings on family conflict, adversity and discord by demonstrating that there is a relationship between increased risk of psychopathology and self-harm, and presence of adverse circumstances and poor parental relationships. The research on ACE and poor parental bonding is similar to the research on family conflict, discord and adversity in that all of these circumstances can potentially lead to situations in which there is a lack or loss of social support. The research on ACE and poor parental bonding contributes to the development of the social support model in that it suggests adverse situations can have harmful effects in terms of increasing risk of self-harm and psychopathology (depression), thereby providing a direct link between adverse circumstances and suicidal behaviour – a premise of the proposed social support model. Perhaps these situations lead to an increase risk of self-harm because they create circumstances in which the availability of social support is either lacking or limited. It seems logical to conclude from this argument that conflict and abuse are
actually examples of situations which lead to the presence of negative emotional support (i.e., support that is defined as lacking or unhelpful).

It could be argued that if a family is largely characterised by conflict, discord and adversity, then there is going to be little or minimal chance that the members within the family will be available to, for instance, spend quality time with each other or be able to support one another by listening or providing advice where appropriate. In this situation, the support could be perceived by the adolescent as lacking or limited. It was also argued previously that if an abuser is present in the family system, he or she might think they are providing emotional support during the loving/contrite phase, when in fact they are actually perpetuating the abuse cycle. In this scenario, the abuse may be likely to be perceived by other members of the family as unsatisfactory and/or unhelpful.

It is further argued that support of a negative nature can exist along a spectrum, similar to the one described for suicidal behaviour, from less severe to very severe. Examples of less severe negative support would include conflicts, fights or “hassles” with friends or families which may result in either little or no impairment in functioning areas such as school, work, home or relationships. Very severe negative support might include abuse or trauma resulting in serious impairment in more than one functioning area. The notion that negative support exists along a spectrum is based on the principle behind the development of the Abuse Dimensions Inventory (ADI) (Chaffin, Wherry, Newlin, Crutchfield & Dykham, 1997; Straus, 1979). The
ADI measures childhood physical and sexual abuse severity. It is a semi-structured inventory used by clinicians when interviewing children 7 to 12 years of age about various aspects of abuse. It was shown that items on the ADI can be reliably coded from interview data (Chaffin et al., 1997). The principle behind its development is that abuse occurs in a variety of forms and on a variety of different levels. For example, some types of touching would be classified as less severe sexual abuse, whereas forced intercourse would be classified as severe sexual abuse (Chaffin et al., 1997). Similarly, a verbal disagreement might be regarded as less severe abuse, whereas physical confrontation might be considered very serious physical abuse. Negative support severity reflects the varying levels of negative support and the resulting impairment of the individual.³

Conversely, positive emotional support can be defined as the presence of one or more of the following items: having someone who will listen when needing to talk about a problem(s) or difficulty; having someone who will provide advice/guidance in a difficult situation; having someone to rely on for help; having someone to spend time with; having someone who will provide comfort, whether it is a crisis situation or not; and having someone who will accept them openly and for who they really are.⁴ The

³ It is important to clarify that the existence of negative emotional support needs to be determined prior to making a rating for negative support severity. It seems logical that a clinician would need to establish its presence before deciding how severe the negative emotional support is for the client. As such, a definition for negative emotional support is provided prior to a definition outlining the varying degrees of negative emotional support and what should be considered in relation to each degree (low, medium and high). An analogy similar to suicide assessment can be made to further clarify this point. A clinician must first determine whether someone is suicidal prior to actually making a suicide risk-level assessment (i.e., are they low, medium or high risk).

⁴ This study was particularly interested in establishing how the varying levels of negative support severity would impact on risk-level assessments and safety interventions recommended by clinicians. It was also interested in examining whether presence of positive support, in addition to negative support severity, influenced the risk-level assessment made by a clinician. In the discussion (Chapter 7), it is
previously listed items for positive support were based upon those found in the Social Supports Behaviour Scale (SSB) (Vaux et al., 1987) and the Social Supports Questionnaire (SSQ) (Sarason et al., 1983). The SSB is a measure consisting of 45 items designed to tap into five different types of supportive behaviour: emotional support, socialising, practical assistance, financial assistance and advice/guidance (Vaux et al., 1987). It has demonstrated good reliability and validity. The SSB asks subjects to indicate on a five-point Likert scale how likely a family member or friend would be to perform a specific supportive behaviour from “no one would do this” to “most family members/friends would certainly do this.” The SSQ is a 27-item inventory examining perceived availability of social support and satisfaction with support received (Sarason et al., 1987). Each item on the inventory has two parts: (a) the first part of each item assesses the number of available others the individual feels he or she can turn to in times of need in each of a variety of situations (Number or Perceived Availability Score) (e.g., “Whom could you count on to help you if you had just been fired from your job or expelled from school?” “Whom do you feel would help if a family member very close to you died?”), and (b) the second part of each item measures the individual’s degree of satisfaction (Satisfaction Score) with the perceived support available in that particular situation. These latter items are measured along a 6-point Likert scale from “very dissatisfied” to “very satisfied.” The SSQ has also demonstrated good validity and test-retest reliability. The positive emotional support items used in this study were based upon those from the SSQ and proposed that future research may want to consider assessing whether varying degrees of positive support (e.g., somewhat helpful to very helpful), in addition to negative support severity (e.g., low, medium or high), have any influence on the type of risk-level assessments and safety recommendations made by clinicians.
the SSB largely because these questionnaires have previously demonstrated excellent reliability and validity.

As discussed, risk-level refers to the level at which a clinician rates the patient with respect to vulnerability to suicide (Berman & Jobes, 1991; Kral & Sakinofsky, 1994). Risk is largely measured on a continuous scale and ranges from ratings of low through to high (Berman & Jobes, 1991; Sommers-Flanagan & Sommers-Flanagan, 1995). Risk-level scales, such as the SPS (Tatman et al., 1993), ISO (Reynolds, 1987) and SIQ (Piersma & Boes, 1997), provide examples of measures used to assess suicide risk on a continuous scale.

Finally, safety interventions, sometimes referred to as crisis planning, are those clinical decisions made at the end of an acute assessment in order to ensure continued safety of an at-risk client (Berman & Jobes, 1991). Safety interventions include such things as hospitalisation, referral for crisis respite, and provision of emergency numbers (Rudd & Joiner, 1998). Based on theoretical knowledge, it has been suggested that safety interventions can be referred to by type (e.g., hospitalisation versus weekly out-patient visits) and overall number (e.g., greater number for those more at risk and a lower number for those at less risk) (see Berman & Jobes, 1991; White, 1999). Information about social support and risk-level was discussed earlier in relation to how these factors impact upon safety interventions (Dicker et al., 1997; Morrissey et al., 1995).
In summary, the particular model proposed for the present research project is one that argues that there will be a relationship between social support (which encompasses negative support, negative support severity and positive support), risk-level assessments and the types of safety interventions necessary to ensure continued safety. This model suggests that the greater the severity of negative support (as determined by the clinician), the higher the risk-level assessment, and consequently, the greater the number of safety interventions necessary to ensure continued safety of an at-risk patient. Of those situations in which negative support has been established to exist by the clinician, this model is then proposing that the severity of negative support (low, medium or high) will impact on the type of risk-level assessments made and safety interventions recommended. It is also being argued that there may be situations in which positive support may also be present and co-occur with negative support (see Figure 1).

Following from this discussion, it would be expected that the presence of positive support would act to reduce the overall risk-level assessment, as well as reducing the number of safety interventions needed to ensure continued safety of the suicidal adolescent. For example, if a patient comes from a family environment of severe conflict and abuse and has a variety of other known risk factors then this might place the patient at a high risk-level and necessitate the need to put a support system in
Figure 1. Current research model incorporating social support (negative support severity and positive support), risk-level and safety interventions.
place, whether it be hospitalising the patient or referring to a child protection agency. In contrast, it is believed that information about positive social support (which may co-occur with negative support severity) will act to reduce the assessed risk-level, and in turn, reduce the need for more severe safety interventions such as hospitalisation or referral to a child protection agency. For example, a patient may experience severe conflict and abuse from most of his family but might be able to talk openly to one of his siblings about the abuse and conflict. In this example, positive support and a high level of negative support severity co-exist. It is argued that perhaps this would result in a lower risk-level assessment and fewer safety recommendations compared to a situation in which a patient experiences severe levels of conflict and abuse but has no family members or friends to talk with about their problems. This latter situation would be expected to result in a higher risk-level assessment and a greater number of safety recommendations compared to the former situation. As was stated previously, this makes sense in that positive social support acts as a protective factor and encourages healthy adolescent development (Frey & Rothlisberger, 1996).

In summary, the safety interventions would be more crisis-oriented (e.g., hospitalisation or respite care) and greater in number for those situations in which a high risk suicidal adolescent presented with severe levels of negative support severity compared to those in which a low risk adolescent presented with low levels of negative support severity. It is further anticipated that the presence of positive support will act to reduce the risk-level and possibly the type and number of safety interventions. The model suggests also that an adolescent with a low risk-level would probably require less crisis-oriented interventions (e.g., appointments with the
therapist the following week, provision of emergency phone numbers) and fewer interventions.

This model is largely based on past research findings which indicate that: (1) there is a clear relationship shown to exist between family conflict, adversity and discord and an increase in risk of suicide (see e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Hollis, 1996; Hurd et al., 1999; Kosky et al., 1990); and (2) social support was found to play a significant role in the decision to hospitalise suicidal adolescents (Dicker et al., 1997; Morrissey et al., 1995). The former finding implies that presence of conflict, adversity and discord (examples of negative support) leads to a greater risk of future self-harm. That is, presence of negative support influences the level of risk. The latter argument implies that support influences the types of safety interventions recommended for suicidal adolescents. However, for this particular relationship, it could be likely that safety interventions may also influence the level of negative support. For example, it is likely that the interventions initiated could play a role in reducing the severity of negative support. If a suicidal adolescent is hospitalised, then this might possibly mean the provision of a supportive environment (positive support) and a reduction in the presence of negative support severity (i.e., temporarily removed from a conflictual environment at home).

It seems obvious to speculate that risk-level will influence safety interventions because research and practice knowledge demonstrates that certain risk-levels necessitate certain safety interventions (e.g., high risk then hospitalise, low risk then
arrange weekly appointments on an out-patient basis) (see e.g., Apsler & Bassuk, 1983; Berman & Jobes, 1991; Engleman et al., 1998; Morrissey et al., 1995; White, 1999). It also seems obvious enough to suggest that the types and number of safety interventions would be dependent upon risk-level and not the reverse.

This model contributes to current research on social support and suicide in that it proposes the assessment of several relationships not examined previously. Although a relationship between level of negative support severity and suicidal behaviour has been implied by the research on adverse family environments (e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994, Campbell et al., 1993; Fergusson & Lynskey, 1995b, Hollis, 1996; Kosky et al., 1990), it has not been specifically labelled, nor has it been linked to social support conceptualisations as advanced by House and Kahn (1985), Pierce et al. (1996), Thompson (1995) and Vaux (1988). This model proposes a concept which integrates the research on family conflict, discord and adversity – that of negative support severity. This concept could be useful in determining whether clinicians use various degrees of negative support severity to prompt implementation of particular risk-level assessments and safety interventions.

This model also proposes several relationships, not specifically addressed by current research, between negative support, positive support, negative support severity, assessed risk-level and safety interventions. Previous research has largely focused on the relationship between positive support (Pinto, Whisman & Conwell, 1998; Pritchard, 1995), negative support (Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al.,
1990) or both (Rubenstein et al., 1998) and assessed risk-level only. The present study aims to extend these findings by testing the relationship that both positive and negative support have with assessed risk-level and safety interventions.

Finally, this model will attempt to contribute to the research on youth suicide by testing the relationship that both social support and assessed risk-level have to safety interventions. Dicker et al. (1997) and Morrissey et al. (1995) previously tested this relationship between social support, risk and safety interventions, however, their focus was primarily on the safety intervention of hospitalisation. This study will attempt to contribute to the research on youth suicide by testing the relationship that social support and assessed risk-level have with the variety of other safety interventions (other than hospitalisation) available to clinicians and their patients (e.g., education about limiting method availability, provision of emergency numbers, respite care, referral to child protection agency, referral to specialist services).

2.9 Summary and Synthesis of Principles and Social Support Model

This chapter examined the conceptualisations of social support advanced by House and Kahn (1985), Pierce et al., (1996), Thompson (1995) and Vaux (1988) in order to assist in the development of a social support model. It also examined the research on levels of suicidal behaviour, family conflict and social support in an effort to develop principles for the present research model (see Tables 2 and 3). This research demonstrated the following: (a) there is evidence for a range of suicidal behaviour (Andrews & Lewinsohn, 1992; Lewinsohn et al., 1994, 1996; Pelkonen et al., 1997); (b) attempters are exposed to more severe forms of family conflict, discord and
adversity than ideators (Fergusson & Lynskey, 1995; Kosky et al., 1990); (c) poor social support is a well-established risk factor for suicidal behaviour in adolescents (D’Attilio et al., 1992; De Man & Leduc, 1995; De Man et al., 1993; Eskin, 1995; Morano et al., 1993; Whatley & Clopton, 1992; Tousignant & Hanigan, 1993); and (d) that there is evidence for a link between social support and its impact upon risk and safety decisions (Dicker et al., 1997; Morrissey et al., 1995). It was further demonstrated that family conflict, adversity and discord serve to increase the risk of suicidal behaviour in adolescents (see e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Hollis, 1996; Hurd et al., 1999; Kosky et al., 1990). It was argued that these factors are, in effect, components of negative social support. It was further argued that a severity measure could be obtained from the different types of negative support and an analogy was made using the ADI (see Chaffin et al., 1997).

A model was proposed in which negative support severity and positive support were seen to have an impact upon risk-level assessments for suicidal adolescents, and that the combined effect of information about social support (which includes negative support severity and positive support) and risk-level were seen to have an impact upon the types of safety interventions recommended to ensure continued client safety (see Figure 1). Overall, this model suggests that risk-level assessments would be lower for those suicidal adolescents with low levels of negative support severity compared to those with higher levels of negative support severity. Although, if positive support is present in addition to low levels of negative support severity, it would be expected that these adolescents would receive even lower risk-level
assessments and even fewer safety interventions than those with low levels of negative support severity with no positive support present.

2.10 The Archival Study and its Relationship to Empirical and Theoretical Material on Social Support, Risk-Level and Safety Interventions

The present research project comprises two parts: (1) a record review (the archival study) examining the interrelationship between negative support, positive support, negative support severity, risk-level and safety interventions across two groups of suicidal adolescents; and (2) administration of a questionnaire to clinicians asking them to make risk-level assessments and recommend safety interventions on the basis of information presented within vignettes (vignette study). It is essential to highlight that the archival and vignette studies are exploratory and focus on the risk-level assessment and safety recommendations from the clinicians' point of view. Results from the archival study were utilised to establish reliability for the social support model concepts and in order to provide direction for the development of the methodology in the vignette study.

The archival study is the first part of the research project and involved an examination of 100 adolescent patient files, comprising 50 attempters and 50 ideators. These files contained acute assessment reports written by clinicians of the Child, Adolescent and Family Service (CAFS) in Wellington and Porirua, New Zealand. Acute assessment reports are those reports written by staff who assess adolescents at-risk for self-harm. This initial part of the study focuses upon collecting information on negative social
support, positive social support, negative support severity (low to high), risk-level and safety interventions according to the previously discussed definitions. As will be elaborated on in Chapter 3, a research assistant will be used in the archival study in order to establish interrater reliability for the constructed measures. Demographic (e.g., age, gender) and risk factor information (e.g., previous attempts/ideation, alcohol/drug misuse/abuse, family history of psychopathology and stressors preceding suicidal event) will also be collected from the assessment reports in order to help describe the sample for this study.

2.11 Research Questions - Archival Study

The main research questions for the archival study are as follows:

1. Based on clinicians’ assessment reports, are there significant differences between attempters and ideators with respect to positive and negative support?

2. Based on clinicians’ assessment reports, are there significant differences between attempters and ideators with respect to the severity of negative support (low to high)?

3. Based on clinicians’ assessment reports, are there significant differences between attempters and ideators with respect to source(s) of support (e.g., family, friends)?

4. Are there significant differences between attempters and ideators with respect to risk-level (e.g., low, medium or high)?

5. Are there significant differences between attempters and ideators with respect to types of safety interventions implemented as indicated in the acute assessment report?
6. Is there a significant relationship between social support (negative or positive) and risk-level as indicated within the assessment reports? Are there significant differences between attempters and ideators with respect to this relationship?

7. Is there a significant relationship between negative support severity and assessed risk-level based on the clinicians' reports? Are there significant differences between attempters and ideators with respect to this relationship?

8. Is there a significant relationship between risk-level and types of safety interventions implemented based on the clinicians' reports? Are there significant differences between attempters and ideators with respect to this relationship?

2.12 Research Hypotheses – Archival Study

1. It is expected that negative support will be recorded in patient files to a significantly greater degree for attempters than ideators. Given that attempters show a more extreme form of suicidal behaviour than those who ideate, it seems reasonable to assume that attempters would be exposed more frequently to negative emotional support (e.g., family conflict, abuse) than ideators. The research on differences between these two groups seems to support this hypothesis (e.g., Dubow et al., 1989; Fergusson & Lynskey, 1995; Kosky et al., 1990). In contrast, it is expected that there will be no significant difference between attempters and ideators with respect to presence of positive support. Acute reports will have little mention of positive support for either group, as professional experience suggests that clinicians fail to acknowledge this aspect and instead focus on assessing the negative aspects of social support. This point was well illustrated by Rak and Patterson (1996) who examined resilience in at-risk
children. They suggested that clinicians need to assess for the presence of any protective factors which may buffer the impact of negative stressors for at-risk children. This same point was demonstrated by Pritchard (1995) and Maltberger (1996) who stated that clinicians need to change their focus and assess the positive counter-indicators which help prevent suicidal behaviour.

2. It is expected that risk-level for future self-harm, based on information provided in the acute assessment report, will be significantly greater for attempters compared to ideators. This hypothesis stems from findings that suggest that attempters tend to experience more childhood adversity than ideators (Fergusson & Lyonskey, 1995b) and report lower levels of family support compared to those who have suicidal ideation (Dubow et al., 1989).

3. It is expected that, as indicated by clinicians' reports, a significantly greater number of safety interventions will be initiated for attempters compared to ideators. It has been argued that the greater the number of risk factors evident with respect to an individual, the more likely that person will be to engage in acts of self-harm (see Berman & Jobes, 1991; Patterson et al., 1983). It seems logical to conclude therefore that clinicians will indicate in their reports that they have implemented a greater number of safety interventions for those who attempt suicide, as they seem to be at greater risk of self-harm, than for those who have suicidal ideation only.

4. It is expected that there will be a significant relationship between negative support severity and assessed risk-level. It is expected that attempters will report a greater degree of negative support severity, and consequently, be rated at a higher risk-level compared to ideators. In contrast, it is expected that ideators will report a
lower degree of negative support severity, and consequently, be rated at a lower risk-level compared to attempters. Again, this relationship would be expected because findings have demonstrated that those who attempt suicide tend to come from backgrounds characterised by greater childhood adversity (see Fergusson & Lynskey, 1995; Kosky et al., 1990) and lower levels of support (Dubow et al., 1989) than those who have suicidal ideation. In addition, it has been demonstrated that risk of suicide increases with exposure to family adversity, conflict and discord (see Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993).

5. It is expected that there will be a significant relationship between assessed risk-level and safety interventions (e.g., Child, Youth and Family (CYF) referral, Respite Care, Time-Out, Method Availability, Referrals to External Agencies), such that the higher the risk-level, the greater the number of warranted interventions. It might be expected that attempters would be subject to a greater number of safety interventions in order to reduce their risk of self-harm as they are at greater risk of self-harm (Dicker et al., 1997; Morrissey et al., 1995). It is also expected that attempters will be more likely to receive safety interventions, such as hospitalisation, referrals to CYF, medication and more frequently scheduled appointments compared to ideators alone. Knowing that attempters have generally more risk factors (and therefore are at greater risk) than ideators and have greater exposure to family dysfunction (Ferguson & Lynskey, 1995; Kosky et al., 1990), it is expected that a greater number of interventions would be initiated for attempters compared to ideators. It has also been demonstrated that the greater the
risk-level, the more likely the clinician will be to pursue a higher level of safety interventions, such as hospitalisation (Stelmachers & Sherman, 1992).

6. Based on hypotheses 4 and 5 and Figure 1, it is expected that the greater the degree of negative support severity, the higher the risk-level and consequently the greater the number of safety interventions implemented, particularly for those who attempt suicide compared to those who ideate only.

2.13 **Relationship of the Archival Study to the Vignette Study**

The vignette study logically follows from the archival study in that it specifically investigates the importance that support plays in clinician judgements on suicide risk and outcome (e.g., safety interventions), and the type of information that clinicians find useful when making risk-level assessments and recommending appropriate safety interventions. In addition, the vignette study is designed to more rigorously test the relationship between the variables of interest by manipulating support (type and severity) and examining its effect on risk-level assessments and safety decisions in a more controlled manner than is possible in the archival study. This study is interested in assessing the interrelationship between negative support severity, positive support, risk-level and safety interventions utilising tests of association.

A more accurate measure of the relationship between support, risk and safety may be obtained by controlling for the level and type of support in artificially constructed vignettes. The archival study largely focuses on coding information from previous assessment reports of suicidal adolescents. However, a limitation of archival research is that reports may very well contain omissions and/or clinician bias, particularly
since clinicians ultimately decide what they will record and how they will record. Using a more controlled approach, the vignette study is constructed in order to more specifically test the relationships between support, risk-level and safety interventions as perceived by the clinician.

The vignette study is the second part of the research project and will involve the administration of a vignette-style questionnaire to clinicians of the CAFS services. Clinicians will be asked to make risk-level assessments and recommendations regarding safety based on the information contained in the vignettes. Each vignette will include an indication of the level of negative support severity and an indication of positive support, if present. The vignette study examines to what extent the provision of positive support information might affect risk-level assessments and the types of safety interventions recommended by CAFS clinicians. The vignette study also explores the decision-making process clinicians undertake when making risk-level assessments and recommending safety interventions.

2.14 Research Questions – Vignette Study

1. Is there a relationship between the severity of negative support and the risk-level assessment made by clinicians?

2. Does the presence of positive support have any effect upon risk-level assessments made by clinicians?

3. Does the risk-level assessment made by the clinician affect the types of safety interventions recommended?
4. Does the level of negative support severity affect the types of safety interventions recommended by clinicians?

5. What processes do clinicians undertake when making decisions regarding risk-level and safety?

2.15 Research Hypotheses – Vignette Study

1. It is expected that the higher the level of negative support severity, the higher the risk-level assessment (as determined by the clinician) will be for the suicidal patient as depicted within the vignette. As previous research has demonstrated, those who have been exposed to a greater level of negative support severity tend to also be at greater risk of self-harm (e.g., Dubow et al., 1989; Fergusson & Lynskey, 1995b; Kosky et al., 1990). As the vignette study is focused upon examining the decision-making process of clinicians, a comparison between attempters and ideators is not essential for this part of the project. What is important is determining whether risk-level changes are dependent upon the level of negative support severity information provided within the vignettes. It will be difficult to accurately determine in the archival study the impact that support might have had on risk and safety, considering that reports may have omitted information shared during the counselling session. Hence the need for controlled testing of the relationship between level of negative support severity and risk-level assessments.

2. It is also expected that the greater the risk-level for any given suicidal patient as depicted within each vignette, the more likely clinicians will be to recommend a greater number of safety interventions. It has been argued that
the greater the number of risk factors present, the more likely the patient will be to engage in self-harm (Berman & Jobes, 1991; Patterson et al., 1983). It seems logical to conclude therefore that clinicians will recommend more safety precautions for patients at greater risk of self-harm (Dicker et al., 1997; Morrissey et al., 1995). It was deemed important to retest this hypothesis in order to obtain a more direct measurement of the relationship between risk-level assessment and safety interventions as recorded by the clinician(s).

3. It is expected that there will be lower risk-level assessments made by clinicians for those vignettes featuring subjects with positive support present in addition to negative support. The possible role of positive support as a buffering factor to suicidal behaviour has largely been understudied (Rak & Patterson, 1996; Pinto, Whisman & Conwell, 1998). Controlling for the presence of positive support in artificially constructed vignettes allows for a more accurate measurement of its effect on risk-level assessments and safety decisions, than is possible in the archival study.

4. It is expected that the lower the negative support severity, the lower the risk-level assessment and consequently the fewer the number of safety interventions recorded by the clinician (Dicker et al., 1997; Morrissey et al., 1995). This relationship is expected as it seems logical that those at greater risk of self-harm would require a greater number of safety interventions in order to ensure continued safety. Conversely, it is expected that there will be a lower risk-level assessment and a reduction in the safety interventions necessary for those vignettes in which positive support is present in addition to negative support.
CHAPTER 3
METHODOLOGY – ARCHIVAL STUDY

3.1 Introduction
This chapter describes the methodology used for the first part of the investigation into the impact of social support on risk-level and safety interventions for suicidal adolescents. As stated previously, the first part of the study was an archival research project aimed at testing the utility of the relationships proposed within the social support model (see Figure 1). The archival study was an exploratory study and assessed risk and safety from the clinicians’ point of view. The objectives of this chapter are to (a) detail the procedure and process of data collection for the archival research project, (b) clearly operationalise the variables of interest, (c) clarify my role and the research assistant’s role during the data collection phase, and (d) to discuss and justify the procedures and tests used in order to analyse the data. These objectives are crucial in that they provide a clear explanation and justification for data collection procedures and statistical tests used in this study. Ethical issues are discussed at the end of Chapter 4 in which the methodology is outlined for the vignette study.

3.2 Description of Setting and Archival Records
This study was conducted within the Child, Adolescent and Family Service (CAFS) in Wellington and Porirua (north of Wellington city), New Zealand. CAFS is part of Capital Coast Health and funded by the Regional Health Authority (RHA). It is a mental health service for young people ranging in age from 1-17 years and involves assessment and treatment for a wide range of mental health disorders as defined by
the DSM IV, the diagnostic and statistical compendium of mental health disorders (American Psychiatric Association, 1994). Recently, CAFS has changed its age limit to include treatment of those from 1-18 years of age. There are two services responsible for the Wellington region: Wellington CAFS and Puketiro (Porirua) CAFS. Staff from both services include representation from a wide range of disciplines, such as nursing, psychiatry, social work, and psychology. The multidisciplinary team for Wellington CAFS is responsible for the Wellington city region and the Puketiro CAFS team is responsible for the region from Porirua to Kapiti Coast.

Approximately 100 suicidal adolescent files (13-17 years) were selected non-randomly from the Puketiro CAFS and Wellington CAFS Clinics, with 50 of those cases being attempters and 50 being ideators. Suicide attempters were defined as those persons who attempted to commit suicide and had sufficient lethality in the method used, but either failed or were rescued. The concept, known as a suicide attempt, represents a “broad domain of self-injurious behaviour that involved some degree of intentionality” (Reynolds & Mazza, 1994, p.528).

Ideators were defined as those persons who had cognitions about wanting to die. Reynolds and Mazza’s (1994) definition of suicidal ideation states that ideation includes “thoughts and ideas about death, suicide, and serious self-injurious behaviour, including thoughts related to the planning, conduct, and outcome of suicidal behaviour” (p.4). Suicidal ideation can then range from general cognitions
about death to more specific thoughts about killing oneself. This definition was also based on past research examining the characteristics of both attempters and ideators (e.g., Dubow et al. 1989; Fergusson & Lynskey, 1995b; Kosky et al., 1990). In the present study, information on intention of self-harm was not collected due to it being largely unavailable in the patients' assessment reports. The majority of clinicians identified in reports whether a client was initially assessed as a result of ideation or due to a suicide attempt. As such, the groups were differentiated according to the accepted definitions proposed by previous research. Information on diagnosis and past attempts/ideation was collected in order to examine whether there were any other identifiable ways of differentiating the groups. This issue of group differentiation is addressed on a larger scale in later discussion.

The Child and Family Clinic receive a large proportion of referrals for young people who have suicidal ideation, but have not necessarily attempted suicide. However, the clinic also receives referrals involving young people who have made suicide attempts by a variety of means including hanging, cutting or ingesting pills. As stated previously, the archival study aimed to select a group of attempters and ideators from clinic files in order to examine whether there were any differences with respect to the variables of interest for this study: negative and positive emotional support, negative support severity, risk-level and safety interventions.

Files were selected non-randomly because there were a limited number of assessments to choose from that fitted the sample criteria (see definitions for ideators and attempters) for those who attempt and those who ideate. In addition, files from
1985 and earlier contained extremely sparse clinical notes, thereby posing a difficulty for data collection. It is important to note that there were no records kept for files dating earlier than 1985, thereby making it impossible to locate any suicide assessments prior to this date. Approximately from 1985 onwards, written records were initiated in order to keep track of all incoming cases (e.g., all assessments including suicide assessments). CAFS has only recently introduced a database to record and track this information. Some cases, by their very nature, were not selected for this study, such as those assessments in which the patient was too young (younger than 13 years) and those assessments in which patients presented because of concerns that they might harm someone else or were psychotic but not suicidal. As stated previously, this study was interested in assessing adolescents (13-17 years), and in particular, those who had presented acutely for concerns of self-harm. In addition, this study only included non-Maori New Zealanders because clients identifying themselves as Maori are referred to a specialist Maori Child, Adolescent and Family Service.

Due to the constraints outlined previously in selecting the attempter and ideator files, a non-random selection procedure was used in order to maximise the number of selected files. Social work research frequently employs this selection technique, particularly when probability methods are not appropriate (Rubin & Babbie, 1993). From approximately 1985 to 1997 (when the study began), files were selected in sequence until a total of 50 attempter and 50 ideator files were obtained.

5 Please note that record refers to a central intake book which contains all the relevant information for any potential client (acute or otherwise), including name, address, presenting problem and assigned worker (if the client is accepted by the clinic). Only recently has CAFS used a computer to record and
Only the acute assessment report was used from the clinical records. Acute assessment reports from the CAFS clinics contain information about the presenting problem, background information and family history, history of suicidal behaviour, past attempts and/or ideation, stressors preceding attempt or ideation, school and academic history, diagnosis and treatment interventions. The reports are brief and generally about 2-3 pages in length. Acute assessments are carried out by two clinicians in order to determine whether a client is at risk of self-harm. However, only one clinician actually prepares the records and writes the assessment report. The other clinician will generally review the case report and suggest any additions and/or changes if necessary. It is between the two clinicians to decide who will write the actual report. Acute assessments are generally conducted within 24 hours of the initial contact with the agency. The majority of acute cases seen at the Puketiro and Wellington Clinics involve presentation of a suicidal young person and his/her immediate family. The reports were based on assessments of suicidal adolescents 13 to 17 years.

3.3 Measurements - Operationalisation

The following section operationalises the variables of interest for this present study: that is, social support (negative support, positive support and negative support severity), risk-level and safety interventions. Both the definition and value labels are provided in order to demonstrate clearly how the variables were measured. These measurements appear in the coding sheet (see Appendix A). The coding sheet was used as a reference tool to assist in data collection from the files.
3.3.1 Negative Emotional Support

Negative emotional support encompasses the existence of dysfunctional, unhelpful or limited support. Negative emotional support was indicated in the event of the presence of one or more of the following:

- people who abuse the young person (physical, emotional, sexual, neglect); which also includes bullying
- people who the young person finds difficult to trust
- people who communicate with the young person in a dysfunctional way (e.g., fights, conflicts)
- people who will not listen to the young person’s problems or difficulties
- people who cannot be relied on for help
- people who do not want to spend time with the young person

(see e.g., Beautrais, Joyce & Mulder, 1996; Campbell et al., 1993; Hollis, 1996; Kosky et al., 1990; Sarason et al., 1983; Vaux et al., 1987).

These previous items are examples of situations which may lead to a loss or lack of support and/or a perception of unhelpful support.

I also utilised my professional expertise in acute assessments to assist in the selection of these individual items. Based on past assessment experience with CAFS colleagues, the above items are generally areas that clinicians collect information on when assessing a patient’s support system. These items for negative emotional support are not to be considered exhaustive, but should be seen as the best and progress notes for a given patient.
representation of factors considered by CAFS clinicians in their assessment of suicidal young people.

Establishment of the relationship between conflict, adversity and discord and youth suicide was critical in order to further illustrate that these variables are actually examples of situations which lead to the provision of negative emotional support (see Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Hurd et al., 1999; Campbell et al., 1993; Hollis, 1996; Kosky et al., 1990).

A value of one was assigned if any of the negative emotional support items appeared within the assessment report and a value of zero was assigned if none of the items was mentioned within the report. This measurement was designed primarily to determine if negative emotional support was present and was a necessary first step before a measurement of negative support severity could be obtained. It seems obvious to suggest that it is essential to first demonstrate the existence of negative support prior to establishing its severity. A nominal scale was chosen as it was deemed the most appropriate measure for demonstrating if it was mentioned or not mentioned in the file. It is important to understand that the acute assessment reports contained limited, and at times minimal, information so it was important to keep the measurement as simplistic as possible.

### 3.3.2 Positive Emotional Support

Positive emotional support was measured according to the presence of one or more of the following items:
• having someone who will listen when needing to talk about a problem(s) or difficulty
• having someone who will provide advice/guidance in a difficult situation
• having someone to rely on for help
• having someone to spend time with
• having someone who will provide comfort and care, whether it is a crisis situation or not
• having someone who will accept them openly and for who they really are

As was indicated in Chapter Two, the items for positive support were obtained from research on social support (Sarason et al., 1983; Vaux et al., 1987). The items from the Social Support Behaviours Scale (SSB) (Vaux et al., 1987) and the Social Supports Questionnaire (SSQ) (Sarason et al., 1983) were modified to assist in the development of the positive emotional support items for this study. Examples of items used from the SSB include:

• listened when I need to talk about my feelings
• showed me that they understood how I was feeling
• did not pass judgement on me
• gave me advice about what to do (Vaux et al., 1987, p. 215)

Examples of items from the SSQ used for this study include:

• Who accepts you totally, including both your worst and your best points?
• Whom can you really count on to tell you, in a thoughtful manner, when you need to improve in some way?
- Whom do you feel truly loves you deeply? (Sarason et al., 1987, p. 500)

The items were chosen from measures previously demonstrated to have good reliability and validity (Sarason et al., 1983; Vaux et al., 1987).

A value of one was assigned if any of the positive emotional support items appeared within the assessment report and a value of zero was assigned if the items were not mentioned within the report. This measurement was designed primarily to test whether positive emotional support was present, as noted in the file.

3.3.3 Negative Support Severity

Negative support severity was measured using a rating of low, medium or high. Low severity was defined as conflicts or fights or general “hassles” with friends or family and would result in little or no impairment in the following functioning areas: school, work, home and social relationships. Medium severity was defined as presence of serious conflicts, fights, bullying and/or abuse (physical, sexual, emotional and verbal) from others and would result in some impairment in at least one of the following areas: school, work, home and social relationships. High severity was defined as the presence of severe trauma, abuse or neglect and would result in serious impairment in more than one functioning area. References in the written report to negative support severity can also include comments written about the past as long as it appears to affect present functioning.

Each of these definitions took into account both the type of conflict (e.g., fight, argument or abuse), as well as its impairment on the individual, such as has been
demonstrated by the Abuse Dimensions Inventory (ADI) (Chaffin et al., 1997; Straus, 1979). The measurement for negative support severity was developed in order to test the varying levels of negative support, from a disagreement with a family member to physical abuse from friend or family member. As discussed earlier, it was also developed based on the assumptions behind the ADI (Chaffin et al., 1997). The assumption is that behaviour can be measured on a continuum from less severe (e.g., unwanted sexual touching) to very severe (e.g., sexually abusive behaviour involving penetration).

Negative support severity was measured utilising the following values: one for low, two for medium and three for high. This ordinal scale was used because it was deemed the most appropriate measure to reflect the magnitude of the variable (McCall, 1986). A measure of negative support severity was not taken with respect to those files where there was no mention of the presence of negative support.

3.3.4 Children’s Global Assessment Scale (CGAS)

The CGAS was used as a measure of the overall severity of disturbance and is commonly used by CAFS clinicians in assessing suicidal adolescents and children. This measure was chosen for the study because it is now required for use by CAFS clinicians in their assessment of the risk-levels of at-risk youth. The scale was evaluated by Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird and Aluwahlia (1983).

The scale and associated instructions for use are presented below:

Rate the subject’s most impaired level of general functioning for the specified time period by selecting the lowest level which describes his/her functioning on a hypothetical continuum of health-illness. Use intermediary levels (eg, 35, 58, 62).
Rate actual functioning regardless of treatment or prognosis. The examples of behaviour provided are only illustrative and are not required for a particular rating.

**Specified Time Period: 1 mo**

**100-91** Superior Functioning in all areas (at home, at school, and with peers); involved in a wide range of activities and has many interests (eg, has hobbies or participates in extracurricular activities or belongs to an organised group such as Scouts etc); likeable, confident; everyday worries never get out of hand; doing well in school; no symptoms.

**90-81** Good Functioning in all areas; secure in family, school, and with peers; there may be transient difficulties and everyday worries that occasionally get out of hand (eg, mild anxiety associated with an important exam, occasionally “blowups” with siblings, parents or peers).

**80-71** No more than slight impairment in functioning at home, at school, or with peers; some disturbance of behaviour or emotional distress may be present in response to life stresses (eg parental separations, deaths, birth of a sibling), but these are brief and interference with functioning is transient; such children are only minimally disturbing to others and are not considered deviant by those who know them.

**70-61** Some difficulty in a single area, but generally functioning pretty well (eg, sporadic or isolated antisocial acts, such as occasionally playing hookey or petty theft; consistent minor difficulties with school work; mood changes of brief duration; fears and anxieties which do not lead to gross avoidance behaviour; self-doubts); has some meaningful interpersonal relationships; most people who do not know the child well would not consider him or her deviant but those who do know him or her well might express concern.

**60-51** Variable functioning with sporadic difficulties or symptoms in several but not all social areas; disturbance would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings.

**50-41** Moderate degree of interference in functioning in most social areas or severe impairment of functioning in one area; such as might result from, for example, suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, poor or inappropriate social skills, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships.

**40-31** Major impairment in functioning in several areas and unable to function in one of these areas; ie, disturbed at home, at school with peers, or in society at large, eg, persistent aggression without clear instigation; markedly withdrawn and isolated behaviour due to either mood or thought disturbance, suicidal attempts with clear lethal intent; such children are likely to require special schooling and/or hospitalisation or withdrawal from school (but this is not a sufficient criterion for inclusion in this category).

**30-21** Unable to function in almost all areas; eg, stays at home, in ward, or in
bed all day without taking part in social activities or severe impairment in reality testing or serious impairment in communication (eg, sometimes incoherent or inappropriate).

20-11 Needs considerable supervision to prevent hurting others or self (eg, frequently violent, repeated suicide attempts) or to maintain personal hygiene or gross impairment in all forms of communication, eg, severe abnormalities in verbal and gestural communication; marked social aloofness, stupor, etc.

10-1 Needs constant supervision (24 hr care) due to severely aggressive or self-destructive behaviour or gross impairment in reality testing, communication, cognition, affect or personal hygiene. (p. 1229)

The CGAS has been found to possess both discriminant and concurrent validity, as well as being reliable between raters and across time (Shaffer et al., 1983).

3.3.5 Risk-level

Risk-level was measured as an ordinal variable and was defined in relation to three categories - low, medium or high risk. As discussed previously, the criteria for these definitions have been compiled from several typologies which exist within suicide research on risk-level (see e.g., Berman & Jobes, 1991; Kral & Sakinofsky, 1994; Patterson et al., 1983; Sommers-Flanagan & Sommers-Flanagan, 1995). These typologies also suggest measuring risk as an ordinal variable largely due to the fact that it is a concept which increases in magnitude, has no absolute zero point and does not possess the properties of equal intervals.

The definitions for each risk-level are as follows:

Low Risk: A person at low risk is defined as someone who makes vague references to suicide, has no or a very poorly detailed plan, access to any methods of self-harm are unattainable or very limited, and choice of method to self-harm is not well-detailed or planned. For example, “jumping off a bridge”, “hanging self”, “taking
pills” or “lying on train tracks” are considered to be poorly detailed in that the person has either not yet obtained the methods or not thought through the methods in a deliberate and detailed fashion. Generally, persons in this category do not know when they might follow through with their plan, and have not yet obtained the methods to self-harm.

**Medium Risk:** A person at medium risk is defined as someone who has considerable ideation and the beginnings of a plan to self-harm, access to any methods of self-harm are moderately attainable, and choice of method to self-harm is planned or detailed. If the person is an ideator, they have generally thought through their plan in a detailed manner and have actually obtained the methods to self-harm. If the person has already used a method of self-harm (attempted), then the attempt would be seen as moderately lethal (e.g. superficial cutting, some pills taken).

**High Risk:** A person at high risk is defined as someone who has a well-detailed and thought out plan, their access to any methods of self-harm are very attainable, and their choice of method used is very lethal (e.g. hanging, overdose of pills, severe lacerations from cutting).

A score of one was assigned for a low risk patient, a value of two was assigned for a moderate risk patient and a value of three was assigned for a high risk patient. Risk-level ratings were made based on the information contained within the acute assessment report. These measures and their definitions were largely constructed to reflect the type of information which would be found in an assessment report. The brevity of the assessment reports needed to be taken into consideration in the
collection of data on risk-level, as more detailed descriptions would have excluded a large proportion of files. The implication of this action is that it would have reduced the power of the statistical tests used.

3.3.6 Safety Interventions

The following is a list of the safety interventions which CAFS clinicians tend to initiate following the acute assessment of a patient:

- Hospitalisation – patient admitted to or having been granted continuance on an inpatient ward for further monitoring following acute assessment

- CYF – Referral to Child, Youth and Family (previously known as CYPFS, Children, Young Persons and Their Families Service. Please note that all ethical applications and coding sheets make reference to the previous name, CYPFS, as the agency has only recently changed name.)

- Respite Care – nursing care arranged by CAFS for the child and his/her family overnight.

- Provision of Emergency Numbers (PERT – Psychiatric Emergency Response Team for after hours and CAFS number for office hours 8:30 am -5:00 pm)

- Time-Out Placement for a Night – informal arrangement made by the family for the young person to have a break from their family either for a night or a few days. Some time-out placements include staying with an extended family member or with a family friend.

- Time-Out Placement for Several Days – same as above except length of stay spans over a number of days rather than a night.
• Limiting of Method Availability – instruction given by the clinician to the parents or caregivers about eliminating means of self-harm from the immediate environment (e.g. hiding or locking away of pills, medicines, poisons, knives, or guns)

• Medication as prescribed by the psychiatrist at CAFS

• Internal Referral for further specialist consultation on the MDT (Multi-Disciplinary Team) at CAFS (e.g. psychiatric consultation, cognitive assessment and/or psychological testing)

• Referral to External Agency or Organisation (e.g. Youth Aid Officer, One-Stop Shops, Access to a Guidance Counsellor at school).

• Next Planned Appointment for client to see therapist.

• Next Planned Telephone Contact between client and therapist.

• Other – Any other decisions made which were not included in the above list e.g., parent keeping a watchful eye, no safety plan mentioned (or mentioned but not specified).

This list was constructed based on my own professional experience conducting acute assessments. I also consulted several staff with respect to this list in order to ensure that it was a good representation of the interventions available to CAFS staff following acute assessment of suicidal youth. For each type of safety intervention (e.g., time-out, medication), a score of one was assigned if it was mentioned in the file and a score of zero was assigned if it was not mentioned in the report. This type of nominal measurement was used largely because of the discrete categorical nature of the variables. The archival study also examined the total number of interventions
which was obtained by summing up each individual item as indicated in the acute assessment report.

3.4 Procedure and Process for Data Collection

This archival research project began by locating records in which an acute assessment was completed. The patient management information system was used to help locate these case records by using a database which specifically identified “acute” cases. Due to staff shortages and funding problems, the Management Team at CAFS indicated that I would be responsible for getting and putting away files at the end of each research day.

A coding sheet (Appendix A) was used to collect the data for social support, risk-level and safety interventions as indicated in the patient files. A research assistant (a clinical psychologist for the CAFS service in Porirua) was used for this part of the study to code the data from the files in order to assist in establishing interrater reliability (see McCall, 1986). It was necessary to demonstrate whether the measurement procedures used by myself and my assistant would result in similar assigned values for the variables of interest for this study. The training and procedures used for the research assistant are discussed in the following section.

Case files were reviewed on-site at Puketiro and Wellington. At the Puketiro clinic, case files from the last year are kept on site. Any files prior to this date are held by a storage company. At the Wellington Clinic, all case files were kept on another site by a storage company. Requests were made for the Wellington and Porirua files to be
delivered and then examined on their respective sites. Files were reviewed in privacy in one of the standard offices available. Files could not be viewed at the storage company, as it is a storage unit only.

3.4.1 Training The Research Assistant for Coding Data

Training for the research assistant began by inviting her to sign a formal contract. This contract included such issues as recording of hours and payment for her duties as a research assistant. Both parties signed and dated the contract.

The research assistant read the contents of the coding sheet. All matters relating to the rating exercise were explained in detail. The assistant understood the content and did not have any questions at this stage. The research assistant was then presented with three fictitious case studies. The case studies were written to include examples of low, medium and high risk-level clients presenting for concerns of suicidality. These case studies are presented in Appendix B, as well as the corresponding coding answers from my assistant and me. Each case study was assigned a three-digit number in order to keep the case study consistent with the scoring sheets.

It was decided after filling in the coding forms for these practice case studies that some revisions were necessary in order to make data collection easier. Among these revisions was an agreement to write down the reasons for choosing negative and/or positive support as mentioned in the patient files. This revision arose from case study #423 in which I failed to record that positive support was mentioned in the assessment report. The research assistant identified exactly where the reference was made to
positive support, thereby making it easier to verify her decision. It was written under the Family Section that the patient “got along well with his brother and sister.” I had failed to record this piece of information and thus agreed to change it to “Yes, Mentioned” for positive support. At this point, it was agreed that we would indicate the basis for our respective decisions for recording the presence or absence of support in order to assist with more efficient and accurate data collection. It was also decided that differentiation was necessary between substance abuse and misuse. Hence item #10 in the coding guide contains a separate definition for each concept.

With respect to rating using the coding guide, there were also differences noted for case study #625. My assistant scored patient #625 as having a medium level of negative support severity, whereas I scored the same patient as having a high level of negative support severity. After discussion, my assistant stated that she did not realise the negative support severity rating needed to take into account all references made to negative emotional support in the report, particularly if there were references to abuse which happened in the past but affected present functioning. After clarifying this issue, it was agreed that patient #625 did in fact have a high level of negative support severity.

We also had a different rating for suicide risk in that I rated patient #625 as being high risk and my assistant rated the same patient as being at moderate risk for suicidality. After discussion, it was felt that for this patient, methods of self-harm were very accessible considering that she was creative enough to break a pencil sharpener and detach the razor blade from the sharpener in order to cut her wrists. It was also
decided that the cutting was a severe laceration, as it required several stitches and thus could not be classified as "superficial". Taking these two factors into account, and making reference to the definition for a high risk suicidal patient, it was agreed that patient #625 was a high risk candidate.

It was decided that I would recode the CGAS so that each impairment category would be assigned a score of one, two, three and so on (e.g., 1-10 = 1; 11-20 = 2; 21-30 = 3 etc.). For example, if either myself or my assistant scored differently within the 11-20 range for the same patient, that patient would still receive the same score, once recoded, of two. It was decided that recoding was desirable given that there has been proven variability between clinicians when they make risk-level decisions (Stelmachers & Sherman, 1992). For each training case study, we both had different scores for the CGAS, but they were all within the same range. After discussion, recoding appeared to be the best solution to the problem.

The revisions as outlined above were made to the coding guide and scoring sheet and can be found in Appendix A. It is important to note that these revisions were possible as a result of engaging in the training process with the research assistant.

3.4.2 Procedure of Review for Coders

It was decided that we would "check-in" after data collection was completed for the first 10 patient files. It was also agreed that further "check-in" periods would follow in the middle of all files reviewed (approximately case #50) and at the end of the cases reviewed. These "check-in" periods were primarily intended to help answer any
questions or concerns that could have arisen throughout the duration of the data collection period. It was thought that these periods would allow for more accurate data collection.

Following our review of the first 10 cases, we discussed how it was important not to make any assumptions based on the information contained in the reports. For example, we could not assume that a given relationship was either positive or negative, unless it was specifically stated. It was also agreed that if the diagnosis was not specifically stated but alluded to, then we could have some flexibility in recording it. For example, if the clinician did not record a provisional diagnosis, but rather commented on the presence of conflict between parent and patient, then the coder was permitted to draw the conclusion that it was a provisional diagnosis of a parent-child relationship problem under Axis IV of the DSM IV (American Psychiatric Association, 1994).6 This was the only area of concern reported at this stage into the coding process.

6 The DSM IV is a diagnostic manual used by clinicians for both adults and children (American Psychiatric Association, 1994). Its most important feature is the provision of diagnostic criteria which is intended to improve the reliability of diagnostic judgements. The manual uses multiaxial assessment which involves assessment of the patient on several axes, “each of which refers to a different domain of information that may help the clinician plan treatment and predict outcome” (p.37). In the DSM IV, the multiaxial classification system uses five axes: Axis I - Clinical Disorders and Other Conditions That May Be A Focus of Clinical Attention (e.g., mood or anxiety disorders), Axis II - Personality Disorders and Mental Retardation, Axis III - General Medical Conditions (e.g., genitourinary and metabolic disorders), Axis IV - Psychosocial and Environmental Problems and Axis V - Global Assessment of Functioning. There are several subcategories within Axis IV assessment, including that of Parent-Child Relational Problem. This problem is found under the generic heading “Relational Problems.” This category should be used when the focus of clinical attention is on a pattern of interaction between the parent and child (e.g., impaired communication) that is related to clinically significant impairment in individual or family functioning or the development of clinically significant symptoms in parent and/or child (American Psychiatric Association, 1994). Finally, Axis V is for reporting the clinician's judgement of the patient's overall level of functioning and is based on a scale score from 0 to 100.
Instead of next meeting at case #50 as initially agreed, both researchers met at case #31 due to some difficulties being raised about coding. Difficulties seemed to reflect the fact that the assessments were extremely varied in both amount and depth of information provided. The following concerns were raised at this stage:

(a) interpretation of support information, and (b) ratings for level of negative support severity.

With respect to both positive and negative emotional support, it was found that whilst clinicians may mention a relationship between the patient and a friend or school counsellor, they often did not give much detail as to whether the client actually perceived this relationship as helpful or not. We agreed that if there was reference to a relationship (e.g., several friends), but no reference to whether it was supportive, the details would be counted only under the quantity section (e.g., several friends = medium-sized group). If information was scarce in the clinical report (e.g., mention of friends only) and made no reference to either quantity or quality, it was agreed that no indication of support would be made in the data collected. There were only a few instances where this resolution had to be applied and as such the effect on analysis outcomes would have been minimal.

There were a few instances where scarcity of information made it somewhat difficult to make a decision with respect to negative support severity. For instance, one report might indicate that “there was violence in X’s background”, whereas another file may say “patient Y experienced physical abuse from the age of 3 to present and this included both witnessing and experiencing the abuse”. Based on this information, one
would conclude, using the severity rating scale, that patient Y might receive a rating of medium severity, but patient X could either receive a rating of low, medium or high depending on the type of abuse and the extent of exposure to the abuse. Both researchers agreed that they would err on the conservative side in these situations. As such, patient X would receive a severity rating of medium, depending of course upon whether there was any mention of the degree of impairment that the abuse had on the client. Low severity ratings were mainly assigned to those situations where there was conflict, but no abuse or trauma.

3.5 Data Analysis

The tests used for this study were chosen as a result of the nature of the data collected. The data were collected from a non-random sample and largely consisted of the collection of categorical data, thereby necessitating the use of nonparametric testing (e.g., \( \chi^2 \)) (Bordens & Abbott, 1996). For the numerical and scale data, t-tests, means and standard deviations were computed using the SPSS 8.0 program. Interrater reliability statistics were computed for all categorical and numerical data.

A multivariate procedure, also known as a loglinear model, was utilised in order to measure the association between multiple levels of categorical data. Loglinear methods allow the researcher to test differences between groups analogous to the ANOVA procedure (SPSS Advanced Statistics 7.5, 1997). In addition, the loglinear method allows the researcher to identify relationships between multiple layers of categorical data. The loglinear model basically constructs a multivariate contingency table. This table enables the investigation of the relationship between the variables,
treated all the variables used in the table as independent variables, with the dependent variables being the number of cases located in each cell of the contingency table (e.g., the variable which is predicted by other variables). The outcome table is a linear model which is developed as a result of this analysis and enables cell frequencies to be predicted. The better the predictive utility of the model, the closer the expected frequency is to the observed frequency. The principle behind the construction of a loglinear model is very similar to that for \( \chi^2 \) in that the observed frequencies and the expected frequencies are compared cell by cell. However, unlike \( \chi^2 \), loglinear analysis enables researchers to explore higher-order interaction effects between several different variables (Clark-Carter, 1997).

The loglinear model analysis, using a backward elimination strategy, was chosen for this study. This means that the model selection procedure begins with a fully saturated model and removes the variables that do not contribute significantly to the model. The backward elimination strategy eliminates the effect(s) with the least predictive value (i.e., largest probability, provided that the probability is greater than 0.05) (SPSS Advanced Statistics 7.5, 1997).

One of the assumptions of loglinear model analysis is independence of the categories contained within the variables. That is, the categories within the variables must be mutually exclusive to one another and exhaustive (similar to the chi-square). The data collected for the variables in this study meet the assumption of independence for the loglinear analysis, since ratings could not belong simultaneously to two or more categories in any given variable. It is important to note that it is not necessary for the
variables themselves to be independent of one another. Expert statistical advice was sought on these issues and confirm that the study did meet the assumption of independence.

The loglinear model allows for testing situations in which there are multiple layers of categorical data. The variables: negative support, positive support, negative support severity, risk-level and total safety interventions were all entered into the analysis in order to determine if they were related to one another. As discussed, this study was interested in determining whether social support (negative, positive) in any way impacted upon the risk-level decisions and safety interventions initiated by clinicians following acute assessment of suicidal youth. Where relationships between two variables were noted as a result of the loglinear analysis, a chi-square analysis was conducted in order to more specifically examine the nature of that relationship. It is important to note that due to the nature of the tests used (i.e., tests of association such as chi-square and loglinear model analysis), causality cannot be concluded from the results. However, it will be possible to speculate about causality using the research reviewed in Chapter 2, as well as using practice and theoretical material available on adolescent suicide. This issue will be examined in more detail in Chapter 7.

3.6 Summary

This chapter began by outlining the data collection procedures and processes for the archival study – the first objective of this chapter. The archival study consisted of a record review using acute assessment reports from the CAFS Service. Data from 50 attempter and 50 ideator files were collected in order to establish reliable measures for
the vignette study. The second objective of this chapter included a discussion of how the files were selected for data collection. Files were selected non-randomly and consecutively from approximately 1985 onward. As discussed previously, there were several constraints placed on the selection process which made it difficult to employ a randomised technique. The third objective of this chapter involved operationalising the following variables accordingly: negative support, positive support, negative support severity, impairment level, risk-level and safety interventions. As discussed previously, a research assistant was used to assist in establishing interrater reliability for the measured concepts – a fourth objective. Finally, it was demonstrated that statistical tests would be chosen based on the type of data being analysed (e.g., chi-square for categorical data; t-tests for scale data).
CHAPTER 4
METHODOLOGY – VIGNETTE STUDY

4.1 Introduction

This chapter outlines the methodology for the vignette study and its objectives include: (a) discussion of the procedures used in the vignette research project, (b) justifying and outlining the process involved in the construction of the vignette questionnaire, (c) justifying and describing the statistical tests used in the vignette study, and (d) outlining the ethical issues involved for both the archival and vignette study. Ethical issues were discussed conjointly as they were very similar for both projects. Again, these objectives are important in that they provide a clear explanation for why particular procedures were undertaken and justify the development of the questionnaire and the statistical tests selected.

The methodology for the vignette study is very different from the archival study, although the definitions used within the measurement tool (vignette questionnaire) were based on the definitions from the archival study. The vignette study was able to more rigorously test the relationships between social support, risk-level and safety interventions by controlling for the social support variable. In addition, the vignette study extended the archival study by including a more in-depth exploratory examination of clinician responses to risk-level and safety interventions for suicidal adolescents.
4.2 Description of Participants

The total population for this study consisted of 25 CAFS clinicians from two CAFS services in the Wellington region. Of the 25 clinicians, 23 agreed to participate in the study, with 10 employed by CAFS Porirua and 10 employed by CAFS Mt. Victoria, Wellington. The three remaining participants were previous employees of CAFS who had conducted many of the acute assessments analysed in the archival study. Clinicians were selected non-randomly for this study.

Of the 23 participants, five were male and 18 were female. The participants for this study consisted of psychologists, social workers and medical staff. The majority of staff (n = 15) reported having up to five years of work experience with adolescents in the mental health field. The remainder (n = 8) reported six to twenty-five years experience working with adolescents.

4.3 Data Collection Instrument – Vignette Questionnaire

The measures used within the vignette questionnaire will be discussed first followed by an explanation of how the vignette questionnaire was developed. The different levels of negative support severity (low, medium and high), as defined in the archival study, were also used in the vignette study. However, a new variable was created as a result of introducing positive support into the various levels of negative support severity. This new variable was labelled negative support severity (without or with positive support) and contained the following items: low level of negative support severity without positive support, medium level of negative support severity without positive support, high level of negative support severity without positive support, low
negative support severity with presence of positive support (talking to), medium level of negative support severity with presence of positive support, and high level of negative support severity with presence of positive support. The variable negative support severity (without or with positive support) was scored from one (low level of negative support severity without positive support) to six (high level of negative support severity with presence of positive support). Again, these items were constructed in order to ensure that every variation of level of negative support severity without positive support and negative support severity with positive support was considered prior to the construction of the vignettes.

As discussed, it is important to note that negative support severity and positive support were combined to form one variable, relabelled as negative support severity (without or with positive support). The word “or” was chosen to reflect the fact that some of the levels of negative support severity contained positive support while others did not. It is important to note that only one item for positive support was chosen for this part of the study. “Talking to” was the chosen item and refers to when a young person is able to talk to another person about their problems, concerns or worries. One item was chosen for this study in order to keep the total number of vignettes to a

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7 It is acknowledged that the scoring system used for the variable, negative support severity (without or with positive support) does in fact imply a measure of intensity (ordinal measure). The scoring used in this study indicates the reverse; that is, that a score of three would be assigned to the category high negative support severity without positive support, whereas a score of six would be assigned to the category of high negative support severity with positive support. The difficulty is that the category high negative support severity with positive support is actually less severe than the category high negative support severity without positive support. It would seem to make more sense if the variable was to be scored as a scale intended to reflect intensity. For example, the scale could be measured from one (low negative support severity with positive support) to six (high negative support severity without positive support). Alternative scoring systems and their implications are discussed in Chapter 7 (see section 7.8). The scoring system used in this study would not have affected the results in any way since the scores were analysed by category (chi-square; loglinear analysis) and not by mean scale scores (T-tests; ANOVA).
minimum. Positive support was introduced into the vignettes in order to test whether it made a difference in clinician risk-level ratings and the types of safety interventions initiated. The positive support item was constructed from the SSQ (Sarason et al., 1983) and the SSB (Vaux et al., 1987).

It is important to acknowledge that the vignette study demonstrated significant relationships between negative support severity (without or with positive support) and assessed risk-level, and negative support severity (without or with positive support) and total safety interventions. These relationships were not uncovered in the archival study. It was thought that if there was no additional information provided by the archival study results when measuring negative support severity and positive support separately that perhaps operationalising them in a different way (i.e., combining them) would provide some insight into the relationship between support and risk-level, and support and safety recommendations.

There are two reasons why positive support and negative support severity were combined to form a new variable, otherwise known as negative support severity (without or with positive support). Firstly, as will be discussed in more detail in Chapter 5, the archival study found that positive support was reported to be present to a significantly greater degree in attempter files compared to ideator files. Although this finding was opposite to that hypothesised, it is possible that clinicians either underreported or failed to question the client about the positive support available to them when the risk of self-harm was lower (as it would be with an ideator).

Consequently, clinicians may have been more attuned to inquiring about positive support
support in clients where the risk was greater (attempters). It is argued that perhaps the measure used for positive support in the archival study did not adequately capture the true presence of positive support, thereby necessitating the development of a different way of measuring positive support. Secondly, it is possible that positive support and negative support severity are simply just different ways of perceiving emotional support. If positive support and negative support severity are indeed related in this sense, it could be argued that they should be measured as one variable. It should be noted that there was no relationship found between negative support severity and positive support in the archival study. However, this finding could be due to the earlier argument proposed that perhaps the archival study did not adequately capture the role of positive support in risk-level assessment and safety recommendations. It is plausible to suggest that positive support and negative support severity may very well be related, particularly since both concepts are simply different ways of perceiving the same event (emotional support). Again, this finding demonstrated a further need to create a measurement in which positive support and negative support severity were combined together.

On a theoretical and practical level, it is important to explain how an individual would experience such a concept as negative support severity (without or with positive support). Providing a few examples might assist in clarifying why negative support severity and positive support were combined. Consider a situation in which an individual receives positive emotional support (in the form of being able to talk to someone about their problems) from one member of their family, but may also have conflicts or arguments with another member of the family (an example of low
negative support severity with positive support). In contrast, for a high level of negative support severity with positive support, an example might be a situation whereby an individual experiences abuse, but is also able to confide in another individual about the abuse. Conversely, it is argued that there may also be situations whereby there is a low level of negative support severity present and no positive support, such as an individual who might generally describe all their relationships as conflictual and/or argumentative and is unable to confide in anyone about their problems. Similarly, an individual who experiences traumatic abuse (sexual, physical) over a long period of time and is not able to talk to anyone or confide in anyone about the abuse provides an example of high negative support severity without positive support. These examples demonstrate that positive support and negative support severity are both related to emotional support and that these concepts are simply different ways of perceiving emotional support (i.e., an example of positive support would be “I can talk to someone about my problems” and an example of negative support would be “I cannot talk to anyone about my problems.”) Taking into consideration that positive support and negative support severity can co-occur and are tapping into the same concept (emotional support) then perhaps it is plausible to measure them together.

As indicated in the following discussion, all possible combinations using the variables of risk-level (low, medium and high) and negative support severity (without or with positive support) were devised prior to construction of the vignettes. This step was necessary in order to ensure that the research was as inclusive as possible of all situations (using the previously mentioned variables) and in order to keep any
research bias to a minimum. The following is a list of all the combinations for risk-level and negative support severity (without or with positive support):

1. low risk-level + low level of negative support severity without positive support
2. medium risk-level + medium level of negative support severity without positive support
3. high risk-level + high level of negative support severity without positive support
4. low risk-level + low level of negative support severity with positive support (talking to)
5. medium risk-level + medium level of negative support severity with positive support (talking to)
6. high risk-level + high level of negative support severity with positive support (talking to)
7. low risk-level + medium level of negative support severity without positive support
8. low risk-level + high level of negative support severity without positive support
9. medium risk-level + low level of negative support severity without positive support
10. medium risk-level + high level of negative support severity without positive support
11. high risk-level + low level of negative support severity without positive support
12. high risk-level + medium level of negative support severity without positive support
13. low risk-level + medium level of negative support severity without positive support

14. low risk-level + high level of negative support severity with positive (talking to)

15. medium risk-level + low level of negative support severity with positive (talking to)

16. medium risk-level + high level of negative support severity with positive (talking to)

17. high risk-level + low level of negative support severity with positive (talking to)

18. high risk-level + medium level of negative support severity with positive (talking to)

Vignettes were based on the types of clients that tend to present acutely to the CAFS service. These clients are generally adolescents ranging in age from 13-17 years, suffer from a variety of different mental health issues (e.g., depression, PTSD, anxiety, suicidal behaviour, BPD), and tend to experience impairment in one or more areas (e.g., school, relationships). Appendix C contains a copy of the questionnaire that was administered to clinicians in the vignette study.

There were two methods of control utilised in this study. The first method of control concerns the provision of risk-level definitions. The clinicians were given definitions of risk in order to reduce the level of inconsistencies between their risk-level assessments. Stelmachers and Sherman (1992) found a reduction in decision variability once a guideline was provided. They presented experienced clinicians with 15 vignettes and asked them to rate risk-level, as well as the types of dispositions or
safety recommendations made. Their study was actually completed in two phases, with the first phase indicating that there was great variability among clinician ratings for vignettes. The second phase introduced some anchoring vignettes from the first study in which some agreement had been reached about risk and safety. These anchoring vignettes were to be used as examples by the clinicians in the second phase in order to see if their ratings improved with guidelines. Stelmachers and Sherman (1992) found that using the “benchmark” vignettes as a guide, raters were able to reduce the variability in their ratings. The aim of providing the risk measure guideline for this thesis was primarily to reduce and control the amount of decision-making variability, as was found in the Stelmachers and Sherman (1992) study.

The second method of control concerns the provision of negative support severity (without or with positive support) information within the vignette questionnaire. It is also important to note that following each vignette, clinicians were provided with the information regarding the level of negative support severity (without or with positive support). The primary intention of this method was to control the negative support severity (without or with positive support) variable in order to assess whether this information in any way affected the types of risk-level assessments and safety interventions recommended initiated by clinicians.

4.4 Procedure and Process for Vignette Study

A consent form and information sheet was given to each potential participant (see Appendix D). Participants were given a week to consider whether they would be interested in participating and were invited to return the consent form in an envelope
provided. Once the consent form was signed, clinicians were approached and an appointment time was arranged. A maximum of three appointments were made each day. There was a 2-3 day period in between organising the next set of appointments. This period of time was necessary in order to allow for coding of the data and to review the material collected previously. Appendix E contains the coding guide used for the vignette study.

At the appointment, clinicians were given instructions and a collection of vignettes. They were asked to make risk-level assessments and recommend safety interventions on the basis of information presented within each vignette. The following instructions were relayed orally to each clinician:

This questionnaire consists of a total of 18 vignettes. Each vignette has been designed to typify the types of acute assessments that we conduct at the clinic. Following each vignette, you will notice that there is a piece of information cited with respect to negative support severity and that this piece of information will vary from vignette to vignette.

The definitions that you will need in order to complete this vignette are contained at the back of the questionnaire (e.g., negative support severity, risk-level and safety interventions). The first page of definitions primarily provides background information. The last two pages of definitions contain the necessary information to help explain negative support severity (without or with positive support), risk-level and safety interventions.

I would like to go through each individual question with you prior to leaving you.

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8 There is an important conceptual issue with respect to the wording safety intervention. For the archival research project, the safety interventions recorded in the patient files were actually interventions that had already been initiated in the past. However, for the vignette study, clinicians were required to record what interventions they would initiate given these hypothetical circumstances. It is important to note that the ethical applications for the vignette study contain the wording “safety recommendations.” To some extent this is true, since clinicians were recording what safety interventions they would likely implement given these situations. However, these situations were hypothetical in nature. Therefore, clinicians technically could only recommend what they would do under these circumstances and did not actually implement these recommendations.
to fill it in. The first question asks you to rate the risk-level of the patient (e.g., low, medium or high) using the definitions provided. The second question asks you to rate how helpful you found it utilising the definitions for each vignette. So, for example, if you chose low risk for a particular vignette because you had to use the definitions provided, but in fact thought the patient was medium risk according to your own conceptualisation, then you might provide a low rating on the usefulness scale indicating it was not useful. However, if the definition you chose fitted with your own model then you might provide a higher rating on the usefulness scale. The third question asks you to tick the appropriate safety interventions you would recommend for each patient. The fourth question asks you to list the top three reasons for your safety intervention choices. You may not always have three reasons, but I used three or more as an anchor point. Finally, the last question asks you to list the steps you took when making your safety intervention choices. For example, what information did you use from the vignette in order to make that decision.

I will leave you now to fill in the questionnaire. I will check-in on you at a later time to see if you have any questions.

Is there anything else I can clarify for you before I leave?

The first clinician to participate in the vignette study filled in the questionnaire in its entirety and feedback that it was a very tiring process (two hours in duration). She suggested that perhaps having clinicians fill in the questionnaire in two separate time slots was more appropriate. Accordingly, all subsequent interviews were scheduled so that the questionnaire was completed in two separate one hour time slots, with approximately a few days between each appointment.

After the first 30 minutes of the hour session, clinicians were approached in order to see if they had any further questions. At the second time slot, there were no interruptions as all participants stated they felt confident enough to complete the questionnaire without any further interruptions.
After the first two interviews, it was fed back that there was some performance anxiety regarding correct/incorrect responses. As a result, the following instructions were added to the beginning of each session: “I am interested in you trying to answer the following questions to the best of your ability, keeping in mind that I am aware the following vignettes contain very limited information.” This change in instruction would not have seriously compromised the results since there had only been two interviews conducted at that stage.

4.5 Data Analysis

As the questionnaires were completed by the clinicians from both clinics, data were entered into the SPSS 8.0 program and analyses were conducted once a reasonable amount of data had been accumulated (approximately half of the sample). The data analysis process for both studies were carried out with the assistance of both the Statistics and Consulting Research Office and Computing Services at Massey University.9

For reliability analysis using risk-level ratings, a multi-rater kappa was calculated using an Excel spreadsheet. This statistic was used in order to examine whether there was reasonable agreement among the clinicians’ responses for risk-level ratings using

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9 Statistical advice was sought from both Dr. Ted Drawneek, Computing Services, Massey University and Duncan Hedderley, Research Officer, Statistics Research and Consulting Office, Massey University. For both the archival and vignette studies, I consulted Dr. Drawneek for advice and guidance on the most appropriate test to use given the type of data collected (e.g., categorical = \( \chi^2 \)). Dr. Drawneek also assisted in the organisation of the data set into the SPSS program. I consulted him on how to request SPSS to conduct analysis such as loglinear model analysis.

Duncan Hedderley, Research Officer, Statistics Research and Consulting Office, Massey University, was also consulted regarding the types of tests deemed most appropriate given the type of data recorded. Mr. Hedderley entered formula commands based on Dunn’s (1989) formula into the MS Excel program, as well as the data set in order for reliability analyses to be conducted for the vignette study. He also programmed Excel to calculate the CA and MCA for the vignette study.
the pre-established ratings as indicated in the coding guide (Appendix E). It is important to note that for situations in which a clinician recorded two risk-levels for one vignette, only the lower risk-level was coded in an effort to err on the conservative side for analysis purposes. The multi-rater kappa statistic was not available in SPSS, but was calculated within the MS Excel program using Dunn’s (1989) formula, an extension and generalisation of the k coefficient to measure agreement between more than two raters. The formula is as follows:

\[
\kappa = 1 - \frac{IK^2 - \sum_{i=1}^{I} \sum_{c=1}^{C} Y_{ic}^2}{K(K-1)\sum_{c=1}^{C} p_c(1-p_c) + \sum_{c=1}^{C} \sum_{k=1}^{K} (p_{kc} - p_c)^2}
\]

where:
- \(I\) = number of items to be rated
- \(K\) = number of raters
- \(C\) = number of possible categories for rating
- \(Y_{ic}\) is the number of raters who allocate the \(i\)th item to the \(c\)th category
- \(p_{kc}\) is the proportion of items that rater \(k\) allocates to category \(c\)
- \(p_c\) is the average of the \(p_{kc}\)’s

Dunn (1989) states that agreement for the evaluation of observed \(k\) values can be identified as:

---

10 Dunn’s (1989) formula is used primarily to test reliability when there are multiple raters (k raters). This means that there are \(K(K-1)/2\) pairs of raters to compare. In effect, the formula calculates the proportion of times it would be expected for raters to agree by chance, then it subtracts this proportion of agreement and divides the result by its maximum value. Therefore, \(K = (Total\ Agreement,\ proportion = 1) - (Expected\ Agreement,\ proportion = p_c)\). The lower case ‘\(c\)’ in the equation is the number of categories raters can categorise items into; which is 3 in this study as there were 3 risk-levels. \(I\) represents the number of case studies being rated and \(Y_{ic}\) is the number of raters who allocate...
<table>
<thead>
<tr>
<th>k</th>
<th>Strength of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>poor</td>
</tr>
<tr>
<td>0.01-0.20</td>
<td>slight</td>
</tr>
<tr>
<td>0.21-0.40</td>
<td>fair</td>
</tr>
<tr>
<td>0.41-0.60</td>
<td>moderate</td>
</tr>
<tr>
<td>0.61-0.80</td>
<td>substantial</td>
</tr>
<tr>
<td>0.81-1.0</td>
<td>almost perfect</td>
</tr>
</tbody>
</table>

Reliability was also calculated to determine whether there were any vignettes for which there were unreliable results. Such an indication would necessitate the need for these vignettes to be deleted from the overall analyses. A description of this process and how it was incorporated into the analysis is presented in Chapter 6.

The majority of data in the vignette study were categorical in nature. Analysis of categorical data included chi-square, loglinear model analysis (backward elimination strategy, see Chapter 3, section 3.5), correspondence analysis (CA) and multiple correspondence analysis (MCA). Similar to factor analysis, CA and MCA look at cross-tabulations and examine relationships between several different categorical variables rather than looking at continuous variables as in ANOVA (Greenacre, 1993). CA and MCA were primarily used in order to specifically examine the relationships between the many different types of safety interventions and their associated risk-level. In this sense, the CA and MCA helped to provide more detail in

\[ \text{object}_i \text{ to category}_c \text{. } i \text{ ranges from } 1 \text{ to } 1; \text{ } c \text{ ranges from } 1 \text{ to } c, \text{ so there is a total of } 1^{*}C^c \text{’s as can be evidenced in the formula (Hedderley, personal communication, Feb. 16, 2000).} \]
analysing the relationships between the categorical variables that were found to be significant in the loglinear model analysis.

The main aim for using the loglinear analysis was to determine whether there was any relationship between negative support severity (without or with positive support), risk-level and safety interventions. Similar to the archival study, the vignette study also met the assumption of independence for the loglinear model analysis (see Chapter 3, section 3.5). That is, the categories within the variables were mutually exclusive to one another and exhaustive (i.e., each vignette could receive one and only one risk-level assessment). Similar to the archival study, it is important to note that due to the nature of the tests used (e.g., tests of association such as chi-square, loglinear model analysis and CA/MCA), clear causal statements could not be made based on these analyses. However, it was still possible to speculate about causality amongst these variables using the research reviewed in Chapter 2. Again, this issue will be examined in more detail in Chapter 7 when the social support model is re-examined.

As discussed, Correspondence analysis (CA) and multiple correspondence analysis (MCA) were used to primarily provide more detail in analysing the relationships between risk-level assessments (low, medium and high) and the individual safety interventions. The CA and MCA attempt to present the main associations and differences graphically for any given set of data. The analysis presents the data as a series of dimensions on a conventional two-dimensional map or graph. The analysis begins by choosing the dimension which accounts for the strongest "inertia"
(association or relationship). Inertia refers to a measure of how strong the association between variables is and the number of respondents contributing data to the analysis. The analysis then selects the dimension (arrangement of variables) which is independent of the first and accounts for the next largest amount of inertia until all the inertia (associations) in the data have been accounted for in the analysis (Hedderley, personal communication, Oct. 18, 1999).

As part of the analysis, there was also an examination of qualitative data provided by clinicians regarding their recommendations for particular safety interventions. These qualitative data provided a holistic understanding of why clinicians respond in particular ways and what information they used in order to make those decisions. These qualitative data capture, from the clinicians’ viewpoint, what they perceive as critical in their decision-making process when assessing youth at-risk.

A qualitative analysis of the written information supplied by clinicians in response to the following questions was conducted:

(1) Please list the top three reasons for choices of safety interventions;
(2) How did you get to reach that decision (list the steps you took when making the decision)?

This exploration used elements of grounded theory, inductive content and thematic pattern analysis (see Holloway, 1997).

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11 Duncan Hedderley, Research Officer, Statistics Research and Consulting Office, Massey University, assisted in transferring the data to Excel and programming Excel to calculate the CA and MCA. Mr. Hedderley also verbally explained the process and meaning of the results, as well as providing this explanation in an email on Oct. 18, 1999.
Inductive content analysis is a type of analysis in which the researcher derives themes and constructs from the data without imposing a prior framework. While analysing the data, the researcher seeks general patterns and generates working hypotheses. The analysis process was as follows:

1. Written responses provided by the clinicians were copied verbatim into a diary
2. The diary was then read in its entirety;
3. Common words were identified from the data provided which then became categories or “clusters”;
4. Both broad and specific categories were identified as dictated by the data (e.g., broad = umbrella term such as psychosocial stress; a specific term would be a subcategory of psychosocial stress such as family conflict, loss or abuse);
5. Finally, the categories/themes from step 4 were placed into a conceptual framework.

Ely, Anzul, Friedman, Garner, McCormack and Steinmetz (1991) and Dey (1993) describe similar experiences when analysing qualitative data. The results chapter for the vignette study describes the process that was involved in constructing these categories (e.g., steps 3 – 5 above) (e.g., psychosocial stress, diagnosis, support networks).

4.6 Ethical Issues – Archival and Vignette Study

For both the archival and vignette studies, ethical approval was sought from the Massey University Human Ethics Committee prior to seeking approval from the Wellington Ethics Committee. This is a procedural task that is required by the Massey
University Human Ethics Committee. Letters of Approval and the National Ethics Application for the present study can be found in Appendix F.¹²

A meeting with the Massey University Human Ethics Committee was required for only the archival study in order to respond to several ethical concerns that were raised by members of the Committee. The concerns raised were as follows: (a) conflict of interest, (b) readability of the Information Sheet, and (c) parental consent. As will be evidenced, some of these concerns were ethical dilemmas actually shared by both the archival and vignette studies.

The concern surrounding a potential conflict of interest was also applicable to the vignette study in which I was a researcher administering questionnaires to CAFS clinicians, while simultaneously being employed by the CAFS Service. In the archival study, the conflict of interest was largely due to the fact that (a) I was an employee of the CAFS clinic, (b) some of the patients referred to in the records might also be past and/or present clients of mine, and (c) I was a colleague of those clinicians who had written the reports I was interested in researching. In my response, I assured the Committee that in order to avoid one conflict of interest, none of my current and/or past clients would be involved in the study. I also agreed to make every effort to ensure confidentiality and anonymity of patients and clinicians, particularly by deleting identifiable information in the reports.

¹² Note that the ethical application refers to a pilot and principal study. For conceptual purposes, the pilot study was relabelled the archival study and the principal study was relabelled the vignette study.
Similar to the Massey University Human Ethics Committee, the main issue brought forth by the Wellington Ethics Committee had to do with the issue of consent in the archival study. Members stated that the New Zealand Health Privacy Code Rule 10 (1)(e) allowed for the project to take place without patient consent so long as the information was used for statistical/research purposes and not publishable in a form that could reasonably be expected to identify any individual(s) concerned. They also considered that as a result of contacting them, patients might be unduly reminded of their past (e.g., past suicidal issues). An anticipated consequence of this action is that it might prompt further mental health issues and cause more harm to past and present patients. It was indicated by the Committee that client files comprised agency-owned and client-owned information. As such, it was also not necessary to obtain consent from the clinicians in order to view the files. However, I did make an effort to present a seminar outlining the project for both CAFS teams.

According to the Wellington Ethics Committee, consent for access to files was not necessary so long as any information published did not identify any individual(s) concerned. The New Zealand Privacy Act Code Rule 10(1)(e)(iii) supports this notion, as can be evidenced in the letter from the Committee (Appendix F). As such, it was decided that the Information Sheets and Consent Forms would not be mailed out to individual patients for the archival study. The Massey University Human Ethics Committee agreed with the decision from the Wellington Ethics Committee.\(^\text{13}\)

\(^{13}\)Initially it was proposed that consent would be sought from patients in order to use their files in the archival study. It was also proposed that information sheets would be mailed out to patients prior to seeking their signed consent. The Massey University Human Ethics Committee requested that for the archival study, the Information Sheet for the patients be presented in a more user-friendly format and that it clearly inform the young person as to the purpose and details of the study. As a result, I undertook to make revisions to the Information Sheet which included the following: (a) using an
In contrast, Information Sheets and Consent Forms were used in the vignette study, since this study was interested in using a sample of clinicians and not files. Revisions to the original Information Sheet were necessary for the vignette study in order to enhance readability and to be more explicit about the ethical rights of participants.

The following changes were made as a result of recommendations made by the Massey University Human Ethics Committee: use of Massey letterhead; bullet point statement of rights as in the Code of Ethical Conduct booklet (e.g., the right to opt out of research at any time); an indication that the Information Sheet and Consent Form would be kept separate from one another; and a clarification that the questionnaire process would take about one and a half hours' of clinician time.

There are several other procedural issues relating to the ethics of the archival and vignette study that were not raised by the Ethics Committees but deserve mention within this discussion. These issues concern the security involved in storing the data and creating a safety net for discussing any issues arising from reading the assessment reports and responses on the vignette questionnaire. It should therefore be noted that any data collected from the present study were kept in a locked filing cabinet. This introductory statement which summarised for potential participants what the study was about and how they were chosen, (b) presenting material in bullet points for easier understanding, and (c) using simpler phrases and wording. In addition, I added a list of support services with phone numbers for each potential participant when the Information Sheet and Consent Form were mailed out.

The Committee also indicated a need to inform parents of potential participants who were 16 years or younger about the research project. I ensured that every effort would be made to contact parents/guardians of those potential participants who were 16 years or younger in age. The Committee considered such contact important, as they perceived the patients' visits to the Centre to be a "shared experience." Accordingly, it was agreed that both patients and their family members be fully informed of the study.

As discussed above, a decision was made by the Wellington Ethics Committee to not seek signed consent from past/present clients. The methodology for the archival study was revised accordingly. I forwarded this change, as well as the letter of approval from the Wellington Ethics Committee to the Chair of the Massey University Human Ethics Committee. Based on the information and approval provided by the Wellington Ethics Committee, the Massey University Human Ethics Committee gave
cabinet was located in the Wellington CAFS file room. Following completion of the study, the photocopied reports and coding sheets were transferred to my chief supervisor's office located on the Massey University Campus. It is a requirement that PhD candidates retain their reports and data for at least five years beyond obtaining their degree. Upon completion of my degree, the reports will be transferred to myself and I will keep them in a locked filing cabinet in my residence.

In addition, all precautions were taken in order to reduce any potential harm to either my assistant, myself or the clinicians involved. If I experienced any difficulties arising from reading the highly emotional material contained within the reports, I was instructed to approach either my thesis supervisors about these issues or my on-site work supervisor (Sr. Social Worker). In the archival study, if my assistant experienced any difficulties as a result of reading "emotionally-charged" material, she was instructed to discuss it with me or my supervisors at Massey University. Clinicians in the vignette study were encouraged to approach their supervisors or my supervisors at Massey University in the event that they experienced any difficulties from reading the vignette material.

4.7 Summary of Vignette Study

The vignette study involved the administration of a questionnaire to 23 CAFS clinicians. The level of negative support severity (without or with positive support) was controlled for within the vignettes. The questionnaire contained vignettes which depicted various situations in which an adolescent presented for concerns of its approval for the change in methodology. Both committees were then in agreement that consent need
suicidality. Clinicians were asked to make risk-level assessments and to note what safety interventions they would recommend based on the subject matter contained within each vignette. The vignette study allowed for more rigorous testing of the relationships between support, risk-level and safety interventions. The first two chapter objectives were met in that there was a thorough discussion of the procedures within the vignette study and the processes involved in the construction of the vignette questionnaire.

Similar to the archival study, the vignette study used a non-random selection procedure and largely consisted of the collection of categorical data, thereby further necessitating the use of nonparametric testing (e.g., chi-square) (Bordens & Abbott, 1996), as well as tests aimed at analysing multiple levels of categorical data (e.g., loglinear analysis). The third objective of this chapter was met in that there was justification for and descriptions of the types of statistical tests used in this study.

The final objective of this chapter was met in that the discussion outlined the ethical issues affecting both the archival and vignette studies. These issues consisted of: (a) conflict of interest, (b) issue of consent, (c) secure storage of data and (d) reducing potential harm to participants. The following Chapters (5 and 6) outline the tests and results from the data analyses for the archival and vignette research projects. The results are examined in relation to the proposed research questions, hypotheses and proposed social support model.

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not be sought from potential participants in the archival study.
CHAPTER 5
ARCHIVAL STUDY RESULTS

5.1 Introduction

This chapter has four main objectives with respect to presenting results from the archival study. The first objective is to report the reliability statistics in order to establish the level of interrater reliability. The second objective is to report the sample characteristics (e.g., age, gender), as derived from the patient records, in an effort to help describe the content of the notes and the sample upon which the notes were based. A third objective is to report the results with respect to whether the attempter and ideator groups differed on the following variables: negative support, positive support, negative support severity, assessed risk-level, impairment level and the number of safety interventions chosen. The final objective is to highlight the two important contributions that the archival study makes to the research on youth suicide; namely, the introduction of a new concept of support (e.g., negative support) and evidence for the relationship between negative support severity and total safety interventions.

The chapter begins by presenting the reliability statistics. The chapter then presents data on the sample characteristics upon which the patient files are written. These characteristics include age, gender, diagnosis, comorbidity, alcohol and drug misuse and abuse, previous suicide attempts, previous ideation and psychiatric history within the family. Chi-square analyses are conducted in order to compare the ideator and attempter groups on these sample characteristics. The chapter then presents chi-square analyses for the variables of negative and positive support, negative support
severity, impairment and assessed risk-level, and safety interventions. Following this section, results from the loglinear analyses are discussed in order to examine the utility of the relationships proposed within the social support model.

5.2 Reliability Statistics

Interrater reliability statistics were computed for all categorical and numerical data. Results indicated that the ratings, based on the archival records, were reliable with one exception. The CGAS scores for the attempter group proved to be unreliable using Kendall’s test ($p < 0.001$), the Wilcoxon test ($p < 0.001$) and the Chronbach test ($p < 0.001$). Any results found to be significant utilising the CGAS for the attempter group therefore need to be interpreted with some caution. As will be discussed, the CGAS scale scores were recoded into their subsequent impairment categories. Kappas calculated for the CGAS (recoded) were found to be unreliable for both the attempter group ($\kappa = 0.25$) and the ideator group ($\kappa = 0.52$). The interrater reliability statistics computed for all the categorical data indicated kappa’s ranging from 0.79 to 1.00. These results indicate a generally high level of agreement.

5.3 Sample Characteristics Derived from Patient Records

With respect to sample characteristics, several variables were identified for both the attempter and ideator groups. These included age, gender, diagnoses as based on DSM IV (Axes I to IV)$^{14}$, comorbidity, background factors such as alcohol and drug

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$^{14}$ The DSM IV is a diagnostic manual used by clinicians for both adults and children (American Psychiatric Association, 1994). In the DSM IV, the multiaxial classification system uses five axes: Axis 1 – Clinical Disorders and Other Conditions That May Be A Focus of Clinical Attention, Axis II – Personality Disorders and Mental Retardation, Axis III – General Medical Conditions, Axis IV – Psychosocial and Environmental Problems and Axis V – Global Assessment of Functioning. Please refer to Chapter 3, footnote 4 for further detail. Please note that this study was interested in determining whether the groups differed with respect to the rate of psychopathology, as such data with respect to the individual diagnoses will not be presented.
misuse, alcohol and drug abuse, previous attempts, previous ideation and psychiatric history within the family. Age and gender are discussed in the following paragraphs and the remaining sample characteristics can be found in Table 4. Information was also collected on method used when engaging in suicidal behaviour for the attempter group. Plan specificity was noted for those identified in the ideator group.

In both the attempter and ideator groups, there were no significant differences found with respect to age. The average age for the attempter group was approximately 15 years and for the ideator group it was the same ($t(2, 98) = 0.08$, n.s.). There were, however, significant differences with respect to gender ($\chi^2(1, N = 100) = 3.93$, $p < 0.05$). Overall, there were more female ($N=71$) than male subjects ($N=29$) and there was a higher proportion of females ($n=40$) in the attempter group compared to the number in the ideator group ($n=31$).

For both groups, the most frequent type of diagnoses made by the clinicians came under either the DSM Axis 1 category (Clinical Disorders) or the DSM Axis 4 category (Psychosocial and Environmental Stressors). According to the acute assessment reports, an Axis 1 diagnosis was given to a total of 37 patients (74%) in the attempter group and to 40 patients (80%) in the ideator group (n.s.). A total of 33 patients (66%) in the attempter group were given an Axis 4 diagnosis as were 28 patients (56%) in the ideator group (n.s.). The most

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It is important to note that chi-square tests were not conducted for those variables in which the cell counts were less than 5, as this would have likely produced an unreliable result. Low cell counts indicate that the chances of an unreliable result is high and that the power of the test is inadequate (Bordens & Abbott, 1996; Clark-Carter, 1997). However, the proportions for the variables in which the cell counts were too low are still reported in the tables more for a matter of interest. Please note that within all the tables in this chapter, variables for which no chi-square test was conducted are indicated by a --. Also note that throughout Chapter 5, findings not significant are indicated by a n.s. (standard short form for not significant).
Table 4
Descriptive Statistics and Chi-Square Analyses for Demographics by Group.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
<th>( \chi^2 ) (df = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSM Axis 1</td>
<td>74 37</td>
<td>80 40</td>
<td>0.51</td>
</tr>
<tr>
<td>DSM Axis 2</td>
<td>2 1</td>
<td>6 3</td>
<td>--</td>
</tr>
<tr>
<td>DSM Axis 3</td>
<td>12 6</td>
<td>8 4</td>
<td>--</td>
</tr>
<tr>
<td>DSM Axis 4</td>
<td>66 33</td>
<td>56 28</td>
<td>1.05</td>
</tr>
<tr>
<td>Comorbidity</td>
<td>32 16</td>
<td>24 12</td>
<td>0.79</td>
</tr>
<tr>
<td>Alcohol and Drug Abuse</td>
<td>20 10</td>
<td>10 5</td>
<td>1.96</td>
</tr>
<tr>
<td>Alcohol and Drug Misuse</td>
<td>8 4</td>
<td>16 8</td>
<td>1.52</td>
</tr>
<tr>
<td>Previous Attempts</td>
<td>46 23</td>
<td>46 23</td>
<td>0.00</td>
</tr>
<tr>
<td>Previous Ideation</td>
<td>40 20</td>
<td>52 26</td>
<td>1.50</td>
</tr>
<tr>
<td>Psychiatric History</td>
<td>26 13</td>
<td>48 24</td>
<td>5.19*</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 50.  <sup>b</sup>n = 50.

* p < 0.05

A frequent Axis 1 diagnosis made for both groups was that of Major Depressive Disorder. Neither group differed with respect to comorbidity (n.s.).
There was no difference found between attempters and ideators with respect to their level of alcohol and drug abuse (n.s.), or their alcohol and drug misuse (n.s.). Clinicians’ reports indicated that ten attempters (20%), compared to five ideators (10%), abused substances. Similarly, clinicians’ reports indicated that four (8%) attempters had had some experience of alcohol and drug misuse, while eight ideators (16%) had had experience of a similar nature.

Both the ideator and attempter groups seem to be very similar in that those who presented to the Child, Adolescent and Family Service (CAFS) as having made an attempt had experienced some suicidal ideation in the past and those who presented with ideation had experienced some form of a suicide attempt in the past (see Table 4). It is important to note that some of the patients from this sample were previous clients of CAFS and may therefore have previously been assessed acutely (either for ideation or an attempt) more than once, but by different clinicians. In such cases, only one of the acute assessment reports was used so long as it fitted the sample criteria as indicated in the coding sheet. Regardless, the important point to note here is that these groups (with the exception of psychiatric history) share similar characteristics, thereby supporting the earlier observation that these groups do in fact overlap (Kosky et al., 1990).

Data were also collected on methods chosen for attempting and plan specificity for self-harm (e.g., details of how one might plan to self-harm, such as planning to jump in front of the rush hour commuter train). The most commonly cited methods chosen for attempting suicide were pills (n=33) and the use of a sharp instrument (n=16). For
the ideator group, approximately 50% had specified a detailed plan at the time of assessment.

With respect to the reasons for the suicidal behaviour, the most commonly cited stressor preceding suicidal behaviour was a fight with a family member (see Table 5). A statistically significant difference was found with 29 (58%) attempter files indicating a greater frequency of fights with family members compared to 17 (34%) ideator files ($p < 0.05$). Some of the other frequently cited reasons for engaging in suicidal behaviour, although not found to be statistically significant, were abuse, break up in a relationship, death of a friend or family member, school problems, fights with friends, parental separation, bullying and medical difficulties. The least frequently cited reasons for suicidal behaviour were relocating, trouble with the law, religion, body image and financial difficulties.

5.4 Support Variables Compared by Group

5.4.1 (A) Negative Emotional Support, Negative Support Severity, Negative Support Source and Negative Support Items

There was no significant difference found between the attempter and ideator groups for negative support ($\chi^2 (1, N = 100) = 0.33$, n.s.). Clinicians’ reports indicated that 42 attempters (84%) showed evidence of negative support compared to 44 (88%) ideators.

Negative support severity was recoded for the chi-square analysis. The medium and high levels of negative support severity were collapsed and relabelled as medium-high level of negative support severity. This recoding was necessary in order
Table 5.

Stressful Life Events Preceding Suicidal Behaviour and Chi-Square Analyses by Group.

<table>
<thead>
<tr>
<th>Stressful Life Events</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
<th>( \chi^2 ) (df = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
</tr>
<tr>
<td>Fights with Family</td>
<td>58</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td>Abuse</td>
<td>24</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Break-up in Relationship</td>
<td>14</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Death</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>School Problems</td>
<td>18</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Fights with Friends</td>
<td>20</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Separation</td>
<td>14</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Bullying</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Medical</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Moving</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Trouble with the Law</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Religion</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Body Image</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Financial</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

<sup>a</sup>\( n = 50 \).  \(<b>\text{b}\> n = 50 \).

* \( p < 0.05 \)
to provide more power for testing and to reduce the likelihood of producing an unreliable result. It has been recommended that low cell counts generally necessitate either combining cell categories (if it is logical to do so) or including more subjects to increase the sample size (Bordens & Abbott, 1996). After recoding, it was found that there was a significant difference between the attempter and ideator groups for negative support severity ($p < 0.05$) (see Table 6). There were 27 attempter files (54%) in which there was an indication of medium-high negative support severity compared to 19 ideator files (38%). An indication of low negative support severity was evident in a total of 15 attempters (30%) and 25 ideators (50%).

Table 6.

Negative Support Severity (Recoded) and Chi-Square Analysis by Group.

<table>
<thead>
<tr>
<th>Negative Support Severity</th>
<th>Attempter$^a$</th>
<th>Ideator$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
</tr>
<tr>
<td>Low</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Medium-High</td>
<td>54</td>
<td>27</td>
</tr>
</tbody>
</table>

$^a_n = 50. \quad ^b_n = 50.$

$\chi^2(1, N = 100) = 3.85, p < 0.05$

Patient files also contained information about the source of negative support. With respect to source of support (e.g., friends, family, community), clinicians’ reports
indicated that negative support originated mainly from friends and family for both participant groups. As can be seen in Table 7, chi-square analyses indicated that there were no significant differences identified between the two groups with respect to source of negative support, be it friends or family.

Table 7.

**Negative Support Source and Chi-Square Analyses by Group.**

<table>
<thead>
<tr>
<th>Support Source</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
</tr>
<tr>
<td>Negative – Friends</td>
<td>52</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td>Negative – Family</td>
<td>76</td>
<td>38</td>
<td>80</td>
</tr>
<tr>
<td>Negative – Community</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 50.  <sup>b</sup>n = 50.

Note. The above chi-square results were not found to be significant (n.s.).

It is important to note that due to extremely low cell counts for both groups in the community category, it was decided that a chi-square test would not be conducted. This decision was made due to the fact that there would have been a strong likelihood of producing an unreliable result with such low cell counts. Explanations for why there were low cell counts in the community category will be discussed further in section 5.4.2.
Within patient files, clinicians made specific references to the types of negative support that their patients experienced. These references included: not being able to trust another person; not being able to talk to someone; being abused whether sexually, emotionally or physically; conflict with either friends or family; being isolated from either friends or family; and being bullied by others (see Table 8). The most commonly cited reason for both groups was conflict with another person; such conflict was recorded for 30 of the attempter files (60%) and 26 of the ideator files (52%). The next most commonly cited reasons were abuse and isolation from friends and family. There were no significant differences between the two groups on any of the individual items for negative support (n.s.).

Table 8.

Chi-Square Analyses of References in Reports to Negative Support by Group.

<table>
<thead>
<tr>
<th>Negative Support References</th>
<th>Attempter(^a)</th>
<th>Ideator(^b)</th>
<th>(\chi^2) (df = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
<td>n</td>
</tr>
<tr>
<td>Negative – Trust</td>
<td>12</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Negative – Talk</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Negative – Abuse</td>
<td>24</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Negative – Conflict</td>
<td>60</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>Negative – Isolation</td>
<td>34</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Negative – Bullying</td>
<td>6</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

\(^{a}n = 50.\) \(^{b}n = 50.\)

*Note.* The above chi-square results were not found to be significant (n.s.).
As will be discussed in greater detail in Chapter 7, these findings make an important contribution to the research on youth suicide in that they suggest the reliability of a new concept, negative support (and consequently negative support severity) as indicated by the kappas in section 5.2. They also simultaneously provide the groundwork for an integrated and comprehensive concept (that of negative support) which aims to incorporate the research on family conflict, discord and adversity (e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al., 1990).

5.4.2 (B) Positive Emotional Support, Positive Support Source and Positive Support Items

There was a significant difference found between the ideator and attempter groups ($\chi^2 (1, N = 100) = 4.86, p < 0.05$), with 29 of the attempter files (58%) making a reference to positive support compared with only 18 ideator files (36%). This finding was contrary to that hypothesised, since it was expected that there would be a greater presence of positive support reported in the ideator group compared to the attempter group. Moreover, the attempter files indicated significantly more positive support as coming from family ($p < 0.05$) (see Table 9). Elaboration of this unexpected finding will be discussed in Chapter 7 (see 7.3.2).

Comparing attempter and ideator reports, no significant differences were found for source of support, whether it be positive or negative, as coming from friends or community. Across both groups, the number of files in which positive support was reported as coming from the community totalled only 7 out of 100 and only 5 out of 100 files in which negative support was reported as coming from community.
Table 9.
Positive Support Source and Chi-Square Analyses by Group.

<table>
<thead>
<tr>
<th>Support Source</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th></th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
<th></th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
<td>n</td>
<td>(df = 1)</td>
</tr>
<tr>
<td>Positive – Friends</td>
<td>36 18</td>
<td></td>
<td>22 11</td>
<td></td>
<td>2.38</td>
</tr>
<tr>
<td>Positive – Family</td>
<td>38 19</td>
<td></td>
<td>14 7</td>
<td></td>
<td>7.48*</td>
</tr>
<tr>
<td>Positive – Community</td>
<td>8 4</td>
<td></td>
<td>6 3</td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>

<sup>a</sup>_n = 50.  <sup>b</sup>_n = 50.

\*_p < .05.

Due to these low cell counts, and consequently, the likelihood of producing an unreliable result, a chi-square test was not conducted for the community category.

One possible explanation for this finding is that community support may be excluded from the acute assessment (e.g., that its importance in preventing suicide is ignored or underrated by clinicians). A second possible explanation is that adolescents may be less likely to seek positive support from their community and more likely to seek it from either their friends or family in which case it is not underrated by the clinician, but rather a true reflection of reality. A final possibility is that the definition of community used in this study may not have been appropriate. Given these possibilities, it is acknowledged that the archival study may not have been able to accurately portray the actual role of community as a source of positive support.
The three most commonly cited items in the reports for evidence of positive support were being able to spend time with others, being able to talk to someone, and being "close" to someone (see Table 10). The overall pattern seems to indicate that these types or sources of positive support were more frequently cited for the attempter group than for the ideator group. However, the only significant difference between the two groups was that for the "positive support - being able to talk to someone" item, which was recorded significantly more often in the attempter files than in the ideator files ($p < 0.05$). Again, this finding will be discussed in more detail in Chapter 7.

Table 10.
Chi-Square Analyses of References in Reports to Positive Support by Group.

<table>
<thead>
<tr>
<th>Positive Support References</th>
<th>Attempter$^a$</th>
<th>Ideator$^b$</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
</tr>
<tr>
<td>Positive – Spending Time</td>
<td>22  11</td>
<td></td>
<td>12  6</td>
</tr>
<tr>
<td>Positive – Close</td>
<td>32  16</td>
<td></td>
<td>22  11</td>
</tr>
<tr>
<td>Positive – Talking</td>
<td>34  17</td>
<td></td>
<td>12  6</td>
</tr>
</tbody>
</table>

$^a$n = 50. $^b$n = 50.  
$^p < 0.05$. 
5.5 Level of Support
With respect to examining any quantifiable variables for support, very rarely were references made in the reports to the size of the support network (e.g., small, medium or large). Out of 100 patient files, only 15 had some mention of the size of the support network. For the attempter group, four files made mention of a small group, two of a medium-sized group and eight mentioned a large group. For the ideators, only four files made mention of a small group and one of a large group. Due to the small cell counts for each of these categories, it was inappropriate to conduct chi-square analyses. There was also little reference made to the actual number of members within the patient’s support network. Therefore, it was once again inappropriate to undertake any further testing.

5.6 Impairment and Risk-Level Measures
5.6.1 CGAS – Impairment Measure
Risk-level measure ratings were made based on what clinicians recorded in their acute assessment notes. Impairment ratings were made in addition to risk-level ratings, as they generally assist clinicians in further determining the level of risk for future self-harm. For overall impairment in functioning, as measured by the CGAS, there was a significant difference found between attempters and ideators ($t(2, 98) = -4.12, p < 0.001$). The mean scale score for the attempter group was 45.50 ($SD = 14.23$) and for the ideator group it was 55.48 ($SD = 9.53$). Based on information in patients’ reports, this finding means that the attempter group was rated as being at greater risk of impairment in overall functioning compared to the ideator group. It is important to note, however, that the standard deviation for the attempter group on the CGAS ratings was large. Given that the reliability of scale scores for the
attempter group were unreliable (see section 5.2), the above findings must be interpreted with some caution.

The scale scores for the CGAS were recoded into their subsequent impairment categories ranging from 1 to 10. With the CGAS, there are 10 impairment categories with scores ranging from 1 to 100. These categories are as follows: (1) 1-10 Needs constant supervision and cannot function at home, in school or with peers; (2) 11-20 Needs considerable supervision and difficulty functioning at home, in school or with peers; (3) 21-30 Unable to function in almost all social areas (home, school or with peers); (4) 31-40 Major impairment in functioning in several social areas and unable to function in one of these areas (home, school or peers); (5) 41-50 Moderate degree of interference in functioning in most social areas or severe impairment of functioning (home, school or with peers); (6) 51-60 Variable functioning with sporadic difficulties or symptoms in several but not all social areas (home, school or with peers); (7) 61-70 Some difficulty in a single area (home, school or with peers), but generally functioning pretty well; (8) 71-80 No more than slight impairment in functioning at home, school or with peers; (9) 81-90 Good functioning at home, in school, and with peers; and (10) 91-100 Superior functioning in all social areas (home, school and with peers).

Recoding the raw CGAS scores into their subsequent impairment categories was necessary for the chi-square and loglinear analysis. The spread of raw scores for the CGAS was too great and would have seriously compromised the power of the statistical tests being conducted due to the large number of cells involved. Due to low cell counts for impairment categories one to four (they were similar in meaning to one
another), it was decided that these categories needed to be collapsed in order to create an overall high category (e.g., 1-4). After recoding, there was still a significant difference between the groups; the attempter group received significantly higher impairment scores than the ideator group ($p < 0.001$) (see Table 11). Again, these findings need to be interpreted with caution largely due to the poor reliability statistics computed for these two groups on this measure. As a result of poor reliability for the CGAS, no further analyses were conducted.

Table 11.

*CGAS (Recoded) Statistics and Chi-Square Analyses by Group*

<table>
<thead>
<tr>
<th>CGAS (Recoded)</th>
<th>Attempter$^a$</th>
<th>Ideator$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impairment Categories</td>
<td>% Yes</td>
<td>n</td>
</tr>
<tr>
<td>1-4 High</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>7 Low</td>
<td>16</td>
<td>8</td>
</tr>
</tbody>
</table>

$^a_n = 50. \quad ^b_n = 50.$

$\chi^2(3, N = 100) = 13.03, p < 0.001$

*Note.* There were no scores noted for impairment categories 8 to 10. As a result, they are not included in this table.
5.6.2 Risk-Level Measure

As stated previously, the risk-level ratings were made on the basis of what clinicians recorded in their acute assessment notes. This specific risk measure was recoded due to low cell counts for the high category and because collapsing the medium and high categories allowed for a more meaningful comparison. It allowed for a more meaningful comparison because the medium and high categories were closer in meaning to one another than the low and medium categories. For the specific risk-level measure recoded, it was found that there was a significant difference between the ideator and attempter groups (p < 0.0001) (see Table 12). The attempters were more likely to be rated at medium-high risk for self-harm than were the ideators.

Table 12.
Risk-Level Measure (Recoded) and Chi-Square Analysis by Group

<table>
<thead>
<tr>
<th>Risk-Level</th>
<th>Attempter^a</th>
<th>Ideator^b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Medium-High</td>
<td>98</td>
<td>49</td>
</tr>
</tbody>
</table>

^a n = 50. ^b n = 50.

χ²(1, N=100) = 71.59, p < 0.0001
5.7 Safety Interventions

Chi-square tests were not conducted on the following intervention items due to low cell counts: hospitalisation, CYF referral\(^\text{16}\), respite care, time-out (for a night and for a day), next arranged telephone call with clinician, liaison with General Practitioner, telling parents about feeling suicidal, talking to people about feeling suicidal, school liaison and promising not to harm oneself. Although there were no significant differences noted between the attempter and ideator groups for the safety interventions listed in Table 13, it is worth noting that the most frequent interventions noted by clinicians for both the attempter and ideator groups were provision of emergency numbers, medication and arranging a next appointment.

The number of safety interventions were totalled for each patient file. Due to low cell counts for safety interventions totalling five to nine, and a need to provide more power for testing, it was necessary to recode scores ranging from five to nine into a new category labelled “five or more.” A Mann-Whitney test was used in this analysis as the total safety interventions variable was a continuous measurement ranging from a minimum score of one to a maximum score of five (or more). This type of nonparametric test is primarily used when the data are continuous or ordinal in nature but when all the assumptions cannot be met for a parametric test. The Mann-Whitney test indicated that there was no significant difference between the two groups with respect to total safety interventions (recoded) \((U = 1221.50, p > 0.05)\). The frequencies indicate that the spread of scores ranging from one to five (or more)

\(^{16}\) CYF – Referral to Child, Youth and Family (previously known as CYPFS – Children, Young Persons and Their Families Service). Please note that all ethics applications and coding sheets make reference to the previous name, CYPFS, as the service only recently changed name. CYF is a child protection agency. Its equivalent in North America would be the Children’s Aid Society (CAS) (Canada) or the Department of Child and Family Services (DCFS) (USA).
Table 13.

Safety Interventions and Chi-Square Analyses by Group.

<table>
<thead>
<tr>
<th>Safety Interventions</th>
<th>Attempter(^a)</th>
<th>Ideator(^b)</th>
<th>(\chi^2) (df = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
<td>% Yes</td>
</tr>
<tr>
<td>Hospital</td>
<td>10</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>CYF</td>
<td>2</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Respite</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Emergency Numbers</td>
<td>48</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>Time-Out</td>
<td>12</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Time-Out – Night</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Time-Out – Day</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Limiting Method</td>
<td>14</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Medication</td>
<td>36</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>Referral – CAFS</td>
<td>10</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Referral – External</td>
<td>18</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Next Appointment</td>
<td>94</td>
<td>47</td>
<td>96</td>
</tr>
<tr>
<td>Next Telephone Call</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Liaison with GP</td>
<td>12</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Tell Parents</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>People to Talk to</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>School Liaison</td>
<td>10</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Promise Not to Harm</td>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Someone Watching Over Child</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

\(^a\)n = 50. \(^b\)n = 50.

was very similar for both the attempter and ideator groups (see Table 14).
Table 14.

**Frequencies for Total Number of Safety Interventions (Recoded) by Group.**

<table>
<thead>
<tr>
<th>Total Safety Interventions (Recoded)</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Total</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>5-9</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

<sup>a</sup>\text{n} = 50. <sup>b</sup>\text{n} = 50.

With respect to time specificity for next appointment and next arranged telephone contact, it appeared as if clinicians very rarely recorded the specific time period between the acute assessment and the next appointment or telephone contact (see Table 15). A likely explanation for this situation is that clinicians may discuss the time specificity at the end of the acute assessment as part of their course of action, but fail to record the exact nature of the next appointment or telephone contact details. Accordingly, the reported results for time specificity may not be a true reflection of what actually happens at the end of an acute assessment.
Table 15.

Safety Interventions (Time Specificity) and Chi-Square Analyses by Group.

<table>
<thead>
<tr>
<th>Time Specificity</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>n</td>
</tr>
<tr>
<td>Appointments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Hour</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>End of Week</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Following Week</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Hour</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>End of Week</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Following Week</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 50.  <sup>b</sup>n = 50.

Note. Chi-square tests were not conducted on time specificity due to low cell counts.

5.8 Loglinear Analysis

The more complex analyses of data for the archival study involved applying a loglinear model in order to test the correlation of multiple categorical variables (social support, risk-level and safety interventions). As indicated earlier, recodings were conducted for negative support severity, risk-level and total safety interventions. As a key aim of this study was to test the interrelationships between social support, risk-level and safety interventions, the loglinear model analysis was crucial in determining
whether there were any significant relationships between these variables. Prior to analysis, several variables had to be recoded – namely that of negative support severity (see section 5.4.1), risk-level (see section 5.6.2) and total safety interventions (see section 5.7). Please refer to the noted sections for specific detail about how they were recoded. The frequencies within the loglinear analysis needed to be of a reasonable size prior to commencing analysis which accounts for why negative support severity, risk-level and total safety interventions had to be recoded.

Three different loglinear model analyses will be presented, keeping these variables constant (i.e., group, risk-level and safety interventions) and introducing different combinations of negative support, negative support severity and positive support. The analyses are presented in this manner in order to determine whether negative support, negative support severity and positive support have any significant effects with risk-level and/or safety intervention recommendations.

The results of the loglinear analysis (backward elimination strategy) indicated that there were several significant interactions. The backward elimination strategy eliminates the effect with the least predictive value (i.e., largest probability, provided that the probability is greater than 0.05). The first loglinear analysis tested for any effects between the following variables: group, risk-level, negative support severity and total safety interventions. The analysis revealed significant effects between group and risk (recoded) and between negative support severity and total safety interventions (recoded). This loglinear analysis terminated at step 10, since at this step the probabilities were all below 0.05. The likelihood ratio chi-square change was 83.01 for the effect between group and risk-level (recoded) ($p < 0.0001$) and 12.70 for negative support severity (recoded) and total safety interventions (recoded).
The final model indicated a likelihood ratio chi-square of 16.10 (p = 0.95), thereby indicating that there were no significant effects between all of the variables entered into this analysis (e.g., no three-way effect). The effect between group and risk-level, consistent with the earlier chi-square findings, means that the attempter group received higher risk-level ratings than the ideator group (see Table 12). The second effect (negative support severity and total safety interventions) seems to indicate that a lower number of safety interventions were initiated by clinicians with respect to patients with lower negative support severity ratings compared to the number initiated for patients with higher negative support severity ratings.

The second loglinear test analysed the following variables: group, negative support, risk and total interventions, with both risk and safety interventions recoded for the analysis. The findings indicated that, with the exception of the effect between group and risk, there were no significant relationships amongst these variables. The likelihood ratio chi-square change was 86.89 for the effect between group and risk-level (p < 0.0001). The final model indicated a likelihood ratio chi-square of 22.50 (p = 0.87), thereby indicating that there were no three- or four-way interactions between group, negative support, risk and total interventions.

The third loglinear test analysed whether there were any effects between the variables of group, positive support, risk-level (recoded) and total safety interventions (recoded). This analysis indicated that there were significant effects between group and risk-level and group and positive support. The likelihood ratio chi-square change was 86.89 for the effect between group and risk (recoded) (p < 0.0001) and 4.90 for group and positive support (p < 0.05). This loglinear result confirms the chi-square
findings in which it was shown that attempters received higher risk-level ratings than ideators and attempters reported receiving more positive support than ideators. The final model indicated a likelihood ratio chi-square of 22.77 ($p = 0.93$), thereby indicating that there were no three- or four-way effects. It is important to note that the standardised residuals for all of the loglinear model analyses previously discussed indicate that the model fits all cells reasonably well.

These loglinear analyses confirm the findings noted from the earlier chi-square tests – namely that attempters received higher risk-level assessments and reported a greater presence of positive support than ideators. In addition, the effect noted between negative support severity and total safety interventions indicated that a lower number of safety interventions were initiated by clinicians with respect to patients with lower negative support severity ratings compared to the number initiated for patients with higher negative support severity ratings. Interestingly, this latter finding confirms one of the expected relationships proposed within the social support model. That is, the finding demonstrates that there is evidence for a relationship between negative support severity and total safety interventions, not previously tested. Dicker et al. (1997) and Morrissey et al. (1995) provide evidence for a relationship between clinical information (such as social support and diagnosis), risk-level and safety interventions, but focus rather on the single outcome variable of hospitalisation. The results from the loglinear model analysis indicated that further testing of the relationships proposed within the social support model was necessary. Further testing was necessary due to the fact that the archival study demonstrated evidence for only one aspect of the social support model (the relationship between negative support severity and total safety interventions).
5.9 Summary and Conclusion of Archival Study Results

The aims of this chapter were to: (a) report the interrater reliability statistics for the archival study, (b) report the sample characteristics of the attempter and ideator groups; (c) report whether there were any group differences for the variables of negative and positive support, negative support severity, risk-level, level of impairment and safety interventions; (d) to report the results with respect to the loglinear model analyses; and (e) to discuss the important contribution that the archival study has for the research on social support and youth suicide. Overall, this chapter met its objectives for reporting these results from the archival study.

On the basis of information collected from acute assessment reports, no significant differences were found between the attempter and ideator groups with respect to diagnosis, comorbidity, alcohol and drug misuse/abuse, past attempts and previous ideation. Indeed, for these variables the two groups were very similar. Of particular importance is the fact that an equal percentage of attempters and ideators were found to have engaged in a previous suicide attempt and that an almost equal percentage of attempters and ideators had experienced previous suicidal ideation. However, these two groups did differ on other measures, such as negative support severity, positive support, risk-level and impairment level. Results indicating differences between the two groups with respect to level of impairment (as measured by CGAS scores) need also to be interpreted with caution due to the poor reliability found for the CGAS impairment scores for the attempter group. Overall, the attempter group had higher risk-level ratings, higher impairment or CGAS ratings, and higher levels of negative support severity compared to the ideator group. Despite having several similarities with respect to sample characteristics, these two groups did differ in terms of risk-
level and the type of behaviour exhibited. These findings demonstrate that attempters and ideators are part of an overlapping population (see Dubow et al., 1989; Fergusson & Lynskey, 1995b; Kosky et al., 1990).

The files examined indicated that the attempter group experienced more positive support and a greater level of negative support severity than the ideator group. These findings appear to be in opposition to one another and further discussion of this dilemma is included in Chapter 7. The attempter group also received higher risk-level ratings and impairment ratings than the ideator group. These findings support the expectation that the attempter group, exhibiting more severe suicidal behaviour than the ideator group, would be at higher risk of suicide and impairment in overall functioning. It was also expected that the attempters would experience a greater level of negative support severity, since they are at greater risk of suicide compared to ideators. These hypotheses were based on the research findings which suggest that attempters tend to experience more childhood adversity than ideators (Fergusson & Lynskey, 1995b; Kosky et al., 1990) and report lower levels of family support compared to those who have suicidal ideation (Dubow et al., 1989). In addition, it has been demonstrated that risk of suicide increases with exposure to family adversity, conflict and discord (see Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993). Contrary to what was expected, there were no significant differences between the two groups with respect to either total safety interventions indicated or individual safety interventions. As discussed, these findings make an important contribution to the research on youth suicide in that they provide evidence for a concept, otherwise known as negative support, which integrates the research on family conflict, adversity and discord. This concept is important because it can
broaden our understanding of how various types and degrees of negative support can affect risk-level assessments and the types of safety interventions initiated by clinicians.

The loglinear model analysis indicated that significant interactions were found between the variables of group and risk-level assessment (recoded), group and positive support, negative support severity (recoded) and total safety interventions (recoded), and group and negative support severity (recoded). It was expected that the level of negative support severity would impact upon both the risk-level assessments and the safety interventions initiated by clinicians. This hypothesis was based on findings which indicated that a lack of support played a significant role in determining risk and consequently the necessary safety interventions needed in order to ensure patient safety (Dicker et al., 1997; Morrissey et al., 1995). The implications of these findings for the proposed social support model are explored in Chapter 7.

The archival study enabled preliminary testing of the interrelationships between social support, risk-level and safety interventions and indicated that more rigorous testing of these relationships was necessary, since only one relationship proposed within the social support model was found to be significant in the archival study; that is, the interaction between negative support severity and total safety interventions (recoded). A supplementary analysis was conducted omitting the variable of abuse from the chi-square and loglinear model analyses in order to determine whether it had any effect(s) on the archival study results. Removal of abuse from the analyses did not appear to have any effect on the relationships found significant in the chi-square analyses, but did in the loglinear model analysis (see Appendix G for full discussion of these post hoc findings).
CHAPTER 6

VIGNETTE STUDY RESULTS

6.1 Introduction

For the vignette study, a questionnaire was administered to 23 Child, Adolescent and Family Service (CAFS) clinicians. The questionnaire consisted of 18 vignettes in which negative support severity (without or with positive support) was varied to ascertain its relationship to clinicians' risk-level assessments and safety intervention recommendations. The clinicians were also asked to indicate the types of information that they used when making their recommendations and the steps that they took during the decision-making process.

This chapter has four main objectives. The first objective is to report the results from the loglinear model analysis. The loglinear analysis was chosen because: (a) it can help to assess whether there are any interactions between the variables, negative support severity (without or with positive support), assessed risk-level and safety intervention recommendations; and (b) it is the most appropriate test to use when measuring multiple layers of categorical data (Clark-Carter, 1997). A second objective is to present results from the MCA and CA analyses conducted in order to determine whether there are particular safety interventions associated with particular risk-levels. The third objective is to assess the written replies provided by clinicians with respect to: (a) the information used to help make their safety recommendations, and (b) the steps that they took to reach their recommendations.
The principles from a grounded theory approach (using thematic pattern and content analysis) were employed for this portion of the analysis. The final objective of this chapter is to outline the contributions of the present study to the research on risk-level assessment and safety interventions.

6.2 Reliability Statistics

As a necessary prelude to the pursuit of the above objectives, reliability statistics were calculated using a multi-rater kappa to determine the level of agreement amongst clinicians for risk-level responses. The multi-rater kappa was calculated to be 0.55 which indicates that agreement is better than chance for risk-level ratings, but not perfect. Frequencies calculated for risk-level responses confirmed that the greatest spread of responses for vignette risk-level assessments, and hence the greatest level of disagreement, was for vignettes 7 and 8 (see Table 16).

Accordingly, an analysis was conducted omitting responses for vignettes 7 and 8. The multi-rater kappa increased from 0.55 to 0.60 - a substantial improvement in inter-rater reliability. Overall, the multi-rater kappa indicated that agreement amongst clinicians for risk-level ratings was adequate, and the results appear to be superior to those in previous studies which examined clinician agreement among risk ratings and clinical disposition decision-making (see Apsler & Bassuk, 1983; Englemen et al., 1998; Hendryx & Rohland, 1997; Stelmachers & Sherman, 1992).
Table 16.

Frequencies for Risk-Level Responses by Vignette.

<table>
<thead>
<tr>
<th>Vignette</th>
<th>Risk-Level</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>18</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>15</td>
<td>7</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>6</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>4</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>13</td>
<td>21</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>21</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>16</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>19</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>9</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>8</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

*Vignettes 1-15 N = 23, vignettes 16-18 N = 22. The sample size for vignettes 16-18 was slightly lower due to the fact that one clinician was unable to complete the questionnaire in the allotted time.

6.3 Experience Analysis

An analysis was conducted to determine whether years of experience working with adolescents in the mental health sector had any impact upon clinician responses.

There were seven clinicians who reported having one year or less clinical
experience, eight who reported one to five years, four with six to ten years, two
with eleven to fifteen years, one with sixteen to twenty years and one with twenty-
one to twenty-five years experience. The mean for years of experience was 5.78
and the median 5.00.

While loglinear analysis using the model selection procedure on SPSS 8.0 does not
permit the removal of the possible effects of one variable on other variables, years
of work experience can be entered into the loglinear analysis to see if it
significantly interacts with any of the other variables in the proposed social support
model (i.e., negative support severity (without or with positive support), assessed
risk-level and safety interventions). To conduct this loglinear analysis it was
necessary to code the variable “years of experience” into the following categories:
one year or less, two to five years and six to twenty-five years. The total safety
interventions variable was recoded into a low category (one to four interventions)
and high category (five to ten interventions). The categorisation for both variables
was chosen to reflect an equal distribution of scores within each specific category
and to increase the power of the loglinear analysis by increasing the numbers within
each individual cell.

There were no significant effects noted between experience and negative support
severity (without or with positive support), assessed risk-level and safety
interventions. The final model indicated a likelihood ratio chi-square of 68.92
(p = 0.85), thereby indicating that there was no significant effect found between all three variables (no three-way effect). It may therefore be concluded that years of work experience did not play a significant role in the risk-level assessments made or interventions chosen. Chi-square tests were also conducted looking at years of experience (recoded) and assessed risk-level ($\chi^2(2, N = 365) = 3.52, p = 0.48$), and years of experience (recoded) and total safety interventions (recoded) ($\chi^2(2, N = 365) = 1.93, p = 0.38$) and no significant results were obtained. Accordingly, no further analyses were conducted using this variable.

Interestingly enough, Stelmachers and Sherman (1992) found that decision-making variability for risk-level assessments and safety intervention recommendations was significantly reduced following the introduction of a risk-level guideline (see Chapter 4, section 4.3). Other studies have also demonstrated that experience plays a role in risk-level assessment and the decision to hospitalise (see Apsler & Bassuk, 1983; Engleman et al., 1998). Perhaps experience was not found to be significantly associated with risk-level assessment in the present study due to the fact that a risk-level guide was provided within the questionnaire. A likely explanation is that assessments made using the risk-level guide may have precipitated certain safety recommendations (e.g., high risk then hospitalise; low risk then arrange a later appointment time). Perhaps the risk-level guide indirectly reduced the variability in the safety interventions recommended by clinicians. However, this alone does not adequately suggest why experience did not have an impact upon recommendations for safety interventions. Regardless, future researchers may want to examine the
role that experience plays in the decision-making process in an effort to further clarify its role in risk-level assessment and safety recommendations.

6.4 Loglinear Model and Chi-Square Analysis For Social Support Model

A loglinear model analysis was conducted utilising the variables of negative support severity (without or with positive social support), assessed risk-level and total number of safety interventions. For this analysis, only the variable, total safety interventions was recoded. The total number of safety interventions for each vignette ranged from one to ten, and it was decided that this variable would be recoded into two categories – low (one to four) and high (five to ten). After recoding, the loglinear analysis had a total cell count of 36 (originally 162). This recoding was necessary in order to deal with the problems associated with small cell counts (i.e., the power of a test can be increased by increasing the cell counts). It was not necessary to recode negative support severity (without or with positive support) or assessed risk-level due to the reduction in the total cell count achieved by limiting the variable of total safety interventions.\textsuperscript{17} Following recoding, the expected and observed frequencies indicated that the cells were of a reasonable size. It is also important to note that the loglinear analysis was conducted omitting clinician responses for vignettes 7 and 8 as a result of the reliability findings indicated earlier.

\textsuperscript{17} Every variation of recoding the variables of negative support severity (without or with positive support), assessed risk-level and safety interventions was entered into the analysis. However, the ideal outcome was the recoding conducted by collapsing the total safety interventions category.
The loglinear model backward elimination strategy begins by eliminating the effect with the least predictive value (i.e., largest probability, provided that the probability is greater than 0.05). The loglinear analysis for the vignette study terminated at step 2, since at this step all of the probabilities were well below 0.05. Therefore, no effect could be removed without significantly reducing the predictive power of the model. The best model revealed significant effects for: negative support severity (without or with positive support) and assessed risk-level, negative support severity (without or with positive support) and total safety interventions (recoded), and assessed risk-level and total safety interventions (recoded).

The likelihood ratio chi-square change was 54.96 for the effect between negative support severity (without or with positive support) and risk-level assessment \( (p < 0.00001) \), 26.19 for negative support severity (without or with positive support) and total safety interventions \( (p < 0.00001) \), and 89.76 for risk-level assessment and total safety interventions \( (p < 0.00001) \). The final model indicated a likelihood ratio chi-square of 15.68 \( (p = 0.11) \), thereby indicating that there was no significant effect found between all three variables (i.e., no three-way effects between negative support severity (without or with positive support), risk-level and safety interventions). The standardised residuals from the loglinear model analysis indicate that the model fits all cells reasonably well. Please refer to Appendix H for further detail regarding the observed and expected frequencies. Appendix H provides further statistical information on the loglinear model results.

because it resulted in the largest reduction in the total cell count, thereby providing more statistical power for analysis.
In order to more specifically examine the nature of these interactions, it was necessary to conduct further chi-square analyses. In order to assist in the interpretation of results, negative support severity (without or with positive support) was recoded into the following dimensions: low negative support severity without positive support, medium-high negative support severity without positive support, low negative support severity with positive support, and medium-high negative support severity with positive support. For the variable, negative support severity (without or with positive support), the medium and high categories were collapsed into one category as they are more similar in meaning to one another than the low and medium or low and high categories. With the variable recoded in this fashion, the results indicated a significant relationship between negative support severity (without or with positive support) (recoded) and risk-level assessments ($p < 0.001$) (see Table 17).

More specifically, those vignettes featuring subjects with either a medium-high level of negative support severity without positive support or medium-high level of negative support severity with positive support had a similar pattern of results when viewed across risk-level assessment categories (see Table 17); that is, they received a greater number of medium and high risk-level ratings than low risk-level ratings by clinician respondents. Interestingly, positive support did not appear to make any difference in the risk-level assessments for vignettes featuring subjects with medium-high levels of negative support severity. Vignettes featuring subjects
Table 17.
Chi-Square Analysis of Negative Support Severity (Without or With Positive Support) (Recoded), and Risk-Level.

<table>
<thead>
<tr>
<th>Negative Support Severity (Without or With Positive Support)</th>
<th>Risk-Level</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low(^a)</td>
<td>%</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity Without Positive Support</td>
<td>21.50</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity Without Positive Support</td>
<td>28.00</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity with Positive Support</td>
<td>26.20</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity with Positive Support</td>
<td>24.30</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium(^b)</td>
<td>%</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity Without Positive Support</td>
<td>4.70</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity Without Positive Support</td>
<td>38.60</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity with Positive Support</td>
<td>19.70</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity with Positive Support</td>
<td>37.00</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High(^c)</td>
<td>%</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity Without Positive Support</td>
<td>29.00</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity Without Positive Support</td>
<td>29.00</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Negative Support Severity with Positive Support</td>
<td>11.50</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium-High Negative Support Severity with Positive Support</td>
<td>30.50</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a n = 107. \(^b n = 127. \(^c n = 131.\)

\(\chi^2(6, N=365) = 34.14, p < 0.001.\)

rated with a low level of negative support severity with positive support were found to have received a greater number of low (26%) rather than medium and high risk-level ratings (20% and 12% respectively) by clinician respondents.
Those vignettes featuring subjects with a low level of negative support severity without positive support received a greater number of high risk-level ratings by clinician respondents compared to low and medium clinician risk-level ratings (see Table 17). For this particular severity level, an unexpected finding was that clinicians rated vignettes featuring subjects containing low levels of negative support severity without positive support either as low (22%) or high risk (29%), with only a few allocating a medium risk-level rating (5%). This unusual result could be due to the fact that positive support was purposefully omitted for these particular vignette subjects. In any case, it might have resulted in fewer high risk-level ratings and more low and medium risk-level ratings if positive support was present in addition to a low level of negative support severity, as can be evidenced in the category labelled low negative support severity with positive support (see Table 17). However, this is only one likely explanation and further exploration of this unusual result will be highlighted in Chapter 7.

There appeared to be a complex yet significant relationship between the variables of negative support severity (without or with positive support) (recoded) and total safety interventions (recoded), as indicated by the chi-square results ($p < 0.001$) (see Table 18). The same significant relationship was found even when negative support severity (without or with positive support) was not recoded ($\chi^2 (5, N = 365) = 34.57, p < 0.001$). As discussed, negative support severity (without or with positive support) were recoded specifically to assist in data interpretation and to increase the test’s analytical power.
Table 18.

Chi-Square Analysis of Negative Support Severity (Without or With Positive Support) (Recoded) and Total Safety Interventions (Recoded).

<table>
<thead>
<tr>
<th>Negative Support Severity (Without or With Positive Support)</th>
<th>Total Safety Interventions (Recoded)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low(^a) (1-4)</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Medium-High Negative Support Severity Without Positive Support</td>
<td>23.60</td>
</tr>
<tr>
<td>Low Negative Support Severity with Positive Support</td>
<td>30.60</td>
</tr>
<tr>
<td>Medium-High Negative Support Severity with Positive Support</td>
<td>25.50</td>
</tr>
</tbody>
</table>

\(^a\)\(n = 157\). \(^b\)\(n = 208\).

\(\chi^2(3, N = 365) = 30.58, p < 0.001\).

Vignettes featuring subjects in which there were medium-high levels of negative support severity (without or with positive support) received a significantly greater proportion of recommendations in the high category (e.g., 39% and 35%) than the
low interventions category (e.g., 24% and 26%). This finding seems obvious in that situations in which there are high levels of negative support (irrespective of positive support) would seem to, by their very nature, necessitate more safety intervention recommendations. For example, the presence of abuse (high level of negative support severity) might necessitate a child protective services referral, medical intervention, ongoing counselling, provision of emergency numbers among a few others. However, the presence of minor conflict (low level of negative support severity) may only necessitate a recommendation for ongoing family and/or individual counselling. For the medium-high levels of negative support severity, positive support did not appear to make any difference in the type of recommendations made (low or high). Perhaps the role of positive support is minimised or even ignored by clinicians in situations where there is a presence of a medium-high level of negative support. It might be more difficult to detect or acknowledge a supportive relationship while exploring more traumatic issues, such as abuse, with clients.

Vignettes featuring subjects in which there were low levels of negative support severity without positive support had a similar proportion of low (21%) and high (17%) category recommendations. Vignettes featuring subjects in which there were low levels of negative support severity with positive support received proportionately less recommendations in the high category (10%) compared to the low interventions category (31%). This finding seems to indicate that positive support may have played a more influential role in recommendations made for
those vignettes in which there was a low level of negative support compared to
those with a medium-high level of negative support. As discussed, it is likely that
medium-high levels of negative support severity may overshadow and consequently
minimise the role and presence of positive support. Perhaps positive support is
more present and easily detectable in those situations where there are low levels of
negative support. It is important to note that this is one likely explanation and that
more research would need to be conducted to further examine the role of social
support in making safety intervention recommendations.

A chi-square test was also conducted in order to more specifically examine the
relationship between total safety interventions (recoded) and risk-level. For the chi­
square test, it was necessary to recode total safety interventions in order to increase
the power of the test by reducing the number of cells. Using a chi-square test, a
statistically positive relationship was found between the variables of risk-level and
total safety interventions (recoded) (\( p < 0.001 \)) (see Table 19). This test was
conducted to specifically examine the relationship between the various levels of
risk (low, medium and high) and total safety interventions. Vignettes featuring
subjects with higher risk-level assessments received proportionately more high
category (5-10) recommendations and vignettes featuring subjects with lower risk­
level assessments received proportionately more low category (1-4)
recommendations. These findings make the following important contributions to
the research on social support and suicidality. First, this study establishes a
relationship between positive support and safety interventions. Although previous
Table 19.

Chi-Square Analysis of Risk-Level by Total Safety Interventions (Recoded).

<table>
<thead>
<tr>
<th>Safety Interventions</th>
<th>Risk-Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Low</td>
<td>(1-4)</td>
<td>54.10</td>
<td>10.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>85</td>
<td>22</td>
</tr>
<tr>
<td>Medium</td>
<td>(5-10)</td>
<td>31.20</td>
<td>37.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49</td>
<td>78</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td>14.60</td>
<td>51.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>108</td>
</tr>
</tbody>
</table>

\[ n = 157 \quad \text{and} \quad n = 208. \]

\[ \chi^2(2, N=365) = 93.57, p < 0.001. \]

Research has indicated a relationship between positive support and risk-level assessment (see Pinto et al., 1998; Pritchard, 1995; Rubenstein et al., 1998), it has not directly tested the relationship between positive support and recommended safety interventions.

Second, the vignette study establishes a relationship between the various levels of negative support severity (without or with positive support) and risk-level assessment. Although this has been indirectly achieved through the research on family conflict, discord and adversity (see e.g., Beautrais, Joyce & Mulder, 1996;
Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al., 1990), the relationship between support and risk-level has not been assessed through the use of a single concept (negative support) which integrates the previous research on family conflict, discord and adversity. Finally, this study assesses the relationship that both positive and negative support have with assessed risk-level and recommended safety interventions. Previous studies have largely focused on the relationship between positive support (e.g., Pinto et al., 1998; Pritchard, 1995), negative support (e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b, Hollis, 1996; Koksy et al., 1990), or both (Rubenstein et al., 1998) and risk-level only. Further elaboration of these contributions and their implications, will be addressed in Chapter 7.

Results indicated that evidence was found for several significant relationships within the social support model – namely that between negative support severity (without or with positive support) and risk-level, risk-level and total safety interventions, and negative support severity (without or with positive support) and total safety interventions. It was previously noted that within these relationships, there were some unusual and unexpected results. These results demonstrate that there is some validity to the interrelationships proposed within the social support model and that perhaps these relationships will provide some insight into how and why clinicians make certain risk-level assessments and safety recommendations.
6.5 Chi-Square Analysis for Risk-Level Assessment and Safety Interventions

As a result of finding a significant effect between total safety interventions (recoded) and risk-level assessment, further specific analysis examining each individual safety intervention by risk-level was deemed essential. Responses to vignettes 7 and 8 were excluded from these analyses for the reason given earlier (see section 6.2). It is important to note that chi-square tests were not conducted for those interventions in which the cell count was low (defined as less than 5) due to the fact that this would have produced unreliable results (indicated by a -- in Table 20). However, the proportions are presented largely for a matter of interest.

Chi-square analysis of safety interventions by risk-level assessment revealed significant associations with 11 variables (see Table 20). Due to low cell counts, chi-square analyses were not conducted on the following variables: hospitalisation, respite care, appointment (next week), phone call (end of week and next week), monitoring, family and individual therapy and external referral. More importantly though, at the 0.05 level, there were statistically significant differences between the various risk-levels (low, medium and high) and the following safety interventions: phone call and internal referral to CAFS staff. At the 0.001 level, there were statistically significant differences between the various risk-levels (low, medium and high) and the following safety interventions: CYF, time-out, medication, limiting method availability, provision of emergency phone numbers,
Table 20.
Chi-Square Analyses of Individual Safety Interventions by Risk-Level Assessment.

<table>
<thead>
<tr>
<th>Safety Interventions</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>$z^2$ (df=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Yes</td>
<td>% Yes</td>
<td>% Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>n</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>Hospitalisation</td>
<td>0.00</td>
<td>12.50</td>
<td>87.50</td>
<td>--</td>
</tr>
<tr>
<td>CYF</td>
<td>5.30</td>
<td>45.70</td>
<td>48.90</td>
<td>35.23**</td>
</tr>
<tr>
<td>Respite Care</td>
<td>0.00</td>
<td>33.30</td>
<td>66.70</td>
<td>--</td>
</tr>
<tr>
<td>Time-Out</td>
<td>7.50</td>
<td>45.80</td>
<td>46.70</td>
<td>34.85**</td>
</tr>
<tr>
<td>Medication</td>
<td>12.80</td>
<td>29.60</td>
<td>57.60</td>
<td>44.13**</td>
</tr>
<tr>
<td>Limiting Method Availability</td>
<td>12.90</td>
<td>43.30</td>
<td>43.80</td>
<td>84.11**</td>
</tr>
<tr>
<td>Emergency Numbers</td>
<td>22.30</td>
<td>38.70</td>
<td>39.10</td>
<td>16.45**</td>
</tr>
<tr>
<td>Appointment</td>
<td>31.00</td>
<td>36.90</td>
<td>32.10</td>
<td>25.83**</td>
</tr>
<tr>
<td>Appointment – 24 hrs.</td>
<td>7.00</td>
<td>38.30</td>
<td>54.70</td>
<td>53.49**</td>
</tr>
<tr>
<td>Appointment – End of Week</td>
<td>32.60</td>
<td>44.70</td>
<td>22.70</td>
<td>16.56**</td>
</tr>
<tr>
<td>Appointment – Next Week</td>
<td>73.20</td>
<td>21.10</td>
<td>5.60</td>
<td>--</td>
</tr>
<tr>
<td>Phone Call</td>
<td>38.30</td>
<td>35.80</td>
<td>25.80</td>
<td>10.05*</td>
</tr>
<tr>
<td>Phone Call – 24 hrs.</td>
<td>26.70</td>
<td>41.10</td>
<td>32.20</td>
<td>2.10</td>
</tr>
<tr>
<td>Phone Call – End of Week</td>
<td>74.10</td>
<td>18.50</td>
<td>7.40</td>
<td>--</td>
</tr>
<tr>
<td>Phone Call – Next Week</td>
<td>100.00</td>
<td>0.00</td>
<td>0.00</td>
<td>--</td>
</tr>
<tr>
<td>Liaison with GP</td>
<td>21.70</td>
<td>29.30</td>
<td>48.90</td>
<td>27.96**</td>
</tr>
<tr>
<td>Liaison with School</td>
<td>28.10</td>
<td>32.00</td>
<td>39.90</td>
<td>3.30</td>
</tr>
<tr>
<td>Monitor</td>
<td>41.70</td>
<td>12.50</td>
<td>45.80</td>
<td>--</td>
</tr>
<tr>
<td>Family/Individual Therapy</td>
<td>64.30</td>
<td>21.40</td>
<td>14.30</td>
<td>--</td>
</tr>
<tr>
<td>External Referral</td>
<td>12.50</td>
<td>37.50</td>
<td>50.00</td>
<td>--</td>
</tr>
<tr>
<td>Internal Referral</td>
<td>13.20</td>
<td>34.20</td>
<td>52.60</td>
<td>7.09*</td>
</tr>
</tbody>
</table>

*p < 0.05.
**p < 0.001.
appointment, appointment at 24 hours, appointment at the end of the week, and liaison with General Practitioner (GP).

There tended to be a significant association between medication and risk-level, with medication more likely to be recommended by clinician respondents for those vignettes where the subject was rated at medium and high risk-level in comparison to where the subject of the vignette was rated at a low risk-level. A similar relationship was found with respect to appointment at 24 hours and liaison with GP.

As indicated by clinicians’ responses, referrals to CYF, time-out placements, limiting method availability and provision of emergency numbers tended to be more significantly associated with those vignettes where the subject was at a medium to high risk-level of suicide compared to those where the subject was at low risk-level. Interventions involving medication, appointment at 24 hours and liaison with GP were also more likely to be recommended for those vignettes where the subject was rated at a medium and high risk-level than a low risk-level. However, when examining only the medium and high risk-level ratings, these latter interventions were recommended to a greater degree for those vignettes where the subject was rated at a high risk-level. For example, a time-out was recommended by clinicians for 49 (46%) of the medium risk-level vignette subjects and 50 (47%) of the high risk-level vignette subjects compared to 8 (8%) of the low risk-level vignettes. In contrast, medication was recommended for 37 (30%) of the medium risk-level vignette subjects and 72 (58%) of the high risk-level vignette subjects compared to 16 (13%) of the low risk-level vignette subjects. Overall, both time-
out and medication were recommended more often for those vignette subjects at medium and high risk-level compared to those at low risk-level. However, when examining only the medium and high risk-level groups, medication was recommended more often for the high risk-level group compared to the medium risk-level group, whereas time-out was recommended almost as frequently for both the medium and high risk-level groups.

Clinicians were more likely to recommend a telephone call for vignette subjects rated at a low and medium risk-level \( (p < 0.05) \). Appointments made for the end of the week were recommended by clinician respondents for those vignette subjects rated at medium risk-level \( (p < 0.001) \). Finally, with respect to the “other” safety interventions mentioned by clinicians, internal referrals to the CAFS team were more likely to be recommended for those vignette subjects at a higher risk-level.

6.6 Correspondence Analysis (CA) and Multiple Correspondence Analysis (MCA): Individual Safety Interventions and Risk-Level

The correspondence analysis (CA) and multiple correspondence analysis (MCA) look at cross-tabulations and examine relationships between several different categorical variables rather than looking at continuous variables as in ANOVA (Greenacre, 1993). The CA and MCA were used to help provide more detail in analysing the relationships between the categorical variables that were found to be significant in the loglinear analysis.
Correspondence analysis (CA) and multiple correspondence analysis (MCA) results confirm the findings reported in the chi-square analysis of safety interventions by risk-level assessment. With respect to the CA, Figure 2 indicates a clear order of low risk-level on the right to high risk-level on the left of the plot. The associations indicate that safety interventions, such as hospitalisation, respite care, medication and liaison with GP tended to be more closely associated with a high risk-level, while delayed appointments (end of week and following week) and telephone calls tended to be more closely associated with a low risk-level. The CA also indicated that referrals to CYF, time-out, limiting method availability, provision of emergency numbers and appointments at 24 hours tended to more often be associated with vignette subjects rated at either medium or high risk-level.

As can be seen in Figure 3, the graphical representation of the MCA displays results similar to that of the CA (see Figure 2) in that the same relationships were found to exist between safety interventions and risk-level. For example, the MCA distinguished between what would be recommended by clinician respondents for those vignettes where the subjects were rated to be at medium and high risk-level (e.g., hospitalisation associated with high risk-level, appointment 24 hours with medium risk-level). In addition, the MCA graph (see Figure 3) demonstrates that some safety interventions were alternatives to others. That is, some safety interventions which were grouped together (e.g., appointments 24 hours, appointment end of week, appointment next week) tend to be recommended independently of one another. For instance, a practitioner might recommend a
Correspondence Analysis Excluding Vignettes 7 and 8

Figure 2. Graphical representation of correspondence analysis (CA) results for safety interventions and risk level.
Figure 3. Graphical representation of multiple correspondence analysis (MCA) results for safety interventions and risk-level.
Figure 3 (continued). Graphical representation of multiple correspondence analysis (MCA) results for safety interventions by risk-level.
phone call or an appointment at the end of the week or a phone call or appointment next week, but usually not more than one of these options. The MCA added a different dimension to the CA in that it highlighted not only the association between the various perceived risk-levels and their consequent safety interventions, but also the relationships between the safety interventions themselves. Again, besides the work completed by Dicker et al. (1997) and Morrissey et al. (1995) which largely focused on the clinical outcome of hospitalisation, little research has been conducted examining whether certain perceived risk-levels prompt the initiation of certain safety interventions.

6.7 Scale Utility for Risk-Level Data: Descriptive Data

A scale was devised in order to explore whether clinicians found helpful the definitions used for risk. The scale was a 7 point scale with values 1-2 representing “least helpful”, 3-5 representing “somewhat helpful” and 6-7 representing “very helpful”. Clinicians were instructed to choose a value on this scale. Overall, clinicians’ assessments of the study’s risk-level classification system varied from “somewhat helpful” to “most helpful”, with means ranging from 4.43 to 5.61 (see Table 21) indicating that the risk-level classification system was generally found to be helpful when making risk-level assessments. The standard deviations ranged from 1.28 to 1.94 indicating that there was little variability amongst clinicians when making their decision about the usefulness of the risk-level classification scheme.
Table 21.
Mean and Standard Deviation Statistics for Scale Utility Data by Vignette.

<table>
<thead>
<tr>
<th>Vignette</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.26</td>
<td>1.94</td>
</tr>
<tr>
<td>2</td>
<td>5.22</td>
<td>1.48</td>
</tr>
<tr>
<td>3</td>
<td>5.39</td>
<td>1.47</td>
</tr>
<tr>
<td>4</td>
<td>5.26</td>
<td>1.81</td>
</tr>
<tr>
<td>5</td>
<td>5.22</td>
<td>1.28</td>
</tr>
<tr>
<td>6</td>
<td>5.61</td>
<td>1.67</td>
</tr>
<tr>
<td>7</td>
<td>5.52</td>
<td>1.44</td>
</tr>
<tr>
<td>8</td>
<td>4.43</td>
<td>1.83</td>
</tr>
<tr>
<td>9</td>
<td>4.48</td>
<td>1.75</td>
</tr>
<tr>
<td>10</td>
<td>5.43</td>
<td>1.62</td>
</tr>
<tr>
<td>11</td>
<td>4.83</td>
<td>1.67</td>
</tr>
<tr>
<td>12</td>
<td>5.17</td>
<td>1.80</td>
</tr>
<tr>
<td>13</td>
<td>4.87</td>
<td>1.63</td>
</tr>
<tr>
<td>14</td>
<td>4.82</td>
<td>1.33</td>
</tr>
<tr>
<td>15</td>
<td>5.09</td>
<td>1.44</td>
</tr>
<tr>
<td>16</td>
<td>5.23</td>
<td>1.63</td>
</tr>
</tbody>
</table>

*a* Vignettes 1-15 N = 23 and vignettes 16-18 N = 22.

Note. Scale 1-7, with 1-2 = least helpful; 3-5 = somewhat helpful; 6-7 = very helpful.

6.8 Qualitative Data Analysis - Overview

The following discussion outlines the conceptual and categorical framework for the following questions: (1) “Please list the top three reasons for choices of safety interventions”, and (2) “How did you get to reach that decision (list the steps you took when making that cognitive choice)?” This framework, as outlined in Chapter 4 (section 4.5 Data Analysis), uses elements of grounded theory, inductive content analysis and thematic pattern analysis.
6.8.1 Inductive Content and Thematic Pattern Analysis: Reasons for Safety Interventions

Figure 4 outlines the conceptual and categorical framework for the reasons for choice of safety intervention(s) and Figure 5 (see p.205) outlines the conceptual and categorical framework for the decision-making steps. In Figure 4, a similarity noted amongst clinician responses was their ability to point to risk factors in order to help explain their choices for safety interventions. For example, if abuse was mentioned in a case vignette, clinicians would record 'abuse' as a reason for choosing CYF referral. This connection from reason (abuse) to intervention (CYF referral) seems logical, particularly since all CAFS staff are required to report any and all abuse concerns to the local CYF office. Therefore, any mention of abuse in the vignettes would necessitate a referral to CYF. However, not all clinicians made this connection explicit; some only wrote 'abuse,' thereby leaving an impression that that was their reason for marking CYF as a safety intervention. It is likely, of course, that other safety interventions could also be linked to the reason of abuse, such as respite care or hospitalisation (safe environments).

'Like' risk factors or reasons were grouped together in the beginning stages of developing the conceptual framework for decision-making. For example, clinicians wrote such reasons as 'bullying,' 'abuse,' 'family conflict,' 'parental separation,' or 'bereavement' in order to explain their reasons for choosing particular safety interventions. Moreover, upon closer examination it was noted that some of these reasons were related. For example, 'bereavement' and 'separation' are actually
Figure 4. Summary of inductive content and thematic pattern analysis for reasons related to choosing safety interventions.
varying forms of loss, thereby leading to creation of the “loss” category. All of these factors were then grouped together and labelled “Psychosocial Stress.” This label was chosen since the categories, as identified by the clinicians in their written responses, seemed to reflect the type of psychosocial stressors experienced by those engaging in suicidal behaviour (see Robbins, 1998; Sandin, Chorot, Santed, Valiente & Joiner, 1998; Spirito, Brown, Overholser & Fritz, 1989; Wagner, 1997).

This process of labeling and comparing helped to establish the first cluster of reasons (or risk factors) known as the (A) cluster – “Psychosocial Stress”, within which the cited types of stressors were “family conflict,” “loss,” “bullying,” and “abuse.” The following are among the interventions that some clinicians recorded they would pursue as a result of family conflict: “family therapy and/or assessment,” “family contract” (particularly to monitor or control behaviour), “time-out or provision of emergency numbers” for cases which “could lead to a resurgence of suicidal preoccupation after hours” and “appointment required in due time to look at family conflict as a way of averting future crises.”

For any mention of “loss,” the most practical safety intervention recommended by clinician respondents was “supportive counselling,” particularly for psychosocial difficulties such as grief or bereavement. For “bullying,” clinicians wrote that they would pursue “school liaison.” Some clinicians were more vague and made reference to the fact that with bullying, the “school situation needed to be addressed.” Finally, for “abuse,” clinicians wrote either “CYF” or “time-out” in
order “to prevent further escalation of violence” and “for client to be in a safe place” as paramount in dealing with the abuse. Depending on the nature of bullying, it too could be seen as a form of abuse. The ultimate goal of dealing with bullying and abuse, from the clinician’s point of view, seemed to be to “create a safe environment” for the suicidal client.

Cluster (B) was identified and labelled “Diagnosis.” Some clinicians noted the presence of “comorbidity” as a reason for choosing either a “psychiatric consultation” or “medication”. One clinician recorded that a “deteriorating mental state” meant that the patient would need to be seen relatively soon after the acute assessment for a reassessment.

Cluster (C) was labelled “Support Networks” and included any mention of “negative support severity” (e.g., none, low, medium or high) and/or “positive support.” Whether clinicians recorded positive and/or negative support as their reason(s) for choosing particular safety intervention(s), most felt that it was important to “build-up the support system” or “strengthen the support system” by enlisting the help of others such as the General Practitioner (GP), school staff or parents of the patient. One clinician wrote that a “supportive therapeutic environment” provided by CAFS was a necessary intervention as a means to help build on the existing support system. Counselling was seen to provide a supportive environment in which “coping mechanisms and social skills” could be taught and built upon. Communicating positive support was also felt to be important as a way
of relaying to patients that “things will change, that people care . . . and that help is on the way.”

In addition, some clinicians felt that it was important to recommend certain interventions when responding to a negative family environment, such as utilising “time-out” as either a means of allowing the patient to be safe in this time of crisis and to assist in “diffusing the present situation.” “Time-out” was seen to be more of an option for those situations in which family resources (e.g., an aunt or grandparents) could be utilised. In those situations where support was lacking for the patient’s parents and the patient was suffering from conduct difficulties, it was felt that the parents were also in need of some positive support. This support was seen as coming from an outside agency such as the CYF Service.

Cluster (D) was labelled “Risk” and included any recordings mentioning whether patient risk was assessed to be at “low”, “medium” or “high” risk. It appeared from the quantitative data that certain risk-levels prompt certain safety interventions (e.g., high risk = hospitalisation; low risk = telephone call and later/delayed appointment). The CA and MCA findings also support this observation. Overall, when the risk-level was high, clinicians tended to opt for “monitoring/supervision” and recorded such interventions as “hospitalisation”, “respite care” and “24 hour appointment.” Clinicians also noted that staying “in contact with the school and GP” was essential as they could assist in “continuing the evaluation” and “may have information about warning signs of an impending attempt.” For patients at
lower risk-level, clinicians apparently felt that monitoring by school staff, the patient’s family and GP were important, particularly when combined with such interventions as the “use of contact emergency numbers” and “educating about limiting methods of self-harm.”

For cluster (E), labelled “Plan”, clinicians noted in their responses that a plan of suicide would affect their choice of safety interventions. If a plan was noted in the vignette, clinicians often thought that “monitoring” was necessary and “that educating parents about limiting access to methods” and how to “contact emergency services after hours” were essential and logical interventions.

For cluster (F), categorised as a “Previous or Recent Attempt”, monitoring was also recommended as a safety precaution. Monitoring appeared to involve a variety of people (e.g., GP, school staff, parents) and a variety of interventions (e.g., having parents watch over their children at home, providing an appointment the next day or provision of emergency numbers). It was difficult to determine the types of safety interventions that clinicians would recommend for clusters G “Lethality”, H “Intentionality”, I “Impulsivity”, J “Hopelessness”, K “Coping Mechanisms”, and L “Demographics” largely because the clinicians did not explicitly record this information.
Figure 4 displays pictorially the analysis of clinicians’ written responses as illustrated by examples of specific responses to the request “List the top three reasons for choice of safety interventions.” This diagram shows that clinicians use risk (e.g., abuse, diagnosis) and protective (e.g., positive support) factors to assist in choosing safety recommendations. An interesting point to note is that all the clusters (A to L) are directly related to risk-level assessment (cluster D). This finding makes sense in that the clusters actually represent the risk factors which have been found to put young people at-risk of self-harm (see footnote 2).

The point was made that the reasons identified by clinicians for recommending particular safety interventions parallel the known risk factors which put youth at-risk for suicidal behaviour: poor social support (Maris, 1997); family or individual history of psychopathology (Beautrais, Joyce & Mulder, 1998c; Clark, 1998; Hollis, 1998); abuse (Beautrais et al., 1996; Brown et al., 1999); demographic factors (Fergusson & Lynskey, 1995); a negative family environment (see Adams et al., 1994; Beautrais, Joyce & Mulder, 1996); history of past attempts (Roberts et al., 1998); and lethality, impulsivity and intentionality (Berman & Jobes, 1991). The process whereby some clinicians identified reasons and demonstrated their link to safety interventions is known as crisis intervention (Berman & Jobes, 1991). That is, a clinician will attempt to identify risk factors, as well as protective factors (support networks), and use this information to help determine the appropriate safety interventions necessary in order to reduce future risk of self-harm.
6.8.2  Inductive Content and Thematic Pattern Analysis: Decision-Making Steps

Approximately one-quarter of the sample (n=8) indicated that their responses for explaining why they recommended particular safety interventions would be the same as their responses for the steps that they took when making decisions about safety interventions. Accordingly, these clinicians either wrote the same answer for both questions or left the answer to the decision-making question blank stating that they considered their responses identical. It is possible that this subgroup of clinicians may have misunderstood the question. The implications of this possible limitation can be found in Chapter 7 (see 7.8 Methodological Issues).

The following risk factors were recorded by clinicians as playing a role in the decision-making process for safety interventions: assessed risk-level, support, lethality, diagnosis (comorbidity), stressors (e.g., abuse, loss, grief, bullying, family disharmony), impulsivity, self-harming behaviour, developmental stage, age, gender, plan, intention, coping mechanisms, hopelessness, helplessness, past/recent attempt, ideation, past mental health experience, lack of male role model and poor frustration tolerance. Only two clinicians wrote that in order to assist in the decision-making steps regarding safety interventions, they drew on their past experience in similar clinical situations. Perhaps the fact that only two clinicians explicitly acknowledged experience as playing a role in assessing risk-level and recommending safety interventions means that the influence or role of experience is largely an unconscious phenomenon. Perhaps experience is the medium through
which clinical information is assessed and decisions for risk-level and safety are made. However, this is speculation and further research looking at the role of experience in decision-making would need to be examined. Interestingly, as indicated previously, the quantitative analysis revealed that experience in and of itself did not seem to have a significant impact on the results from this study (see 6.3 Experience Analysis).

Examining responses for decision-making steps, it seems that the clinicians tended to use clinical information from the vignettes as their initial step toward decision-making for safety interventions (see Figure 5). Clinical information refers to the aforementioned risk factors, client background and history, all of which are utilised in order to reach a decision about client risk-level. Once this has been achieved, the step next identified was recommending the appropriate safety intervention(s) given patient history and assessed risk-level. The choice of safety intervention(s) was made in order to prevent further attempts and to provide immediate safety for the patient. Interventions tended to be more immediate and crisis-oriented for those vignettes where the subject was rated to be at higher risk of suicide.

The content and theme analysis for both the reasons for choice of safety intervention(s) and for the steps in decision-making appear to indicate that clinicians follow a standard procedure when undertaking this process. According to the qualitative data analysis, the procedure consists of examining all relevant
Clinical Information (includes risk factors and clinician's past experience)  

Risk-Level Decision  

Clinical Intervention(s) = Prevention and Safety Provision

Figure 5. Summary of inductive content and thematic pattern analysis for the decision-making process for safety interventions.

Clinical information (past and present) of the patient (e.g., family history of mental illness, past/recent attempts etc.), making a risk-level assessment and using the risk-level assessment to determine the necessary clinical intervention(s) to monitor and ensure safety. Clinical information, as noted previously, largely helps to explain why the patient is suicidal and helps to determine the risk-level assessment of any given patient.

6.9 Summary and Conclusion of Vignette Study Results

The aims of this chapter were to: (a) report the results from the loglinear analysis, (b) report the results from the MCA and CA analyses, (c) explore the data (using qualitative methods) provided by clinicians with respect to the decision-making process for recommending safety interventions, and (d) outline the contributions
made by the present study to the research on risk-level assessment and safety interventions.

Like the archival study, the vignette study also aimed to examine the interrelationships between support, risk-level and safety interventions (see Figure 1). Using a loglinear model analysis, significant effects were found for negative support severity (without or with positive support) and assessed risk-level, negative support severity (without or with positive support) and total safety interventions (recoded), and assessed risk-level and total safety interventions (recoded). The multi-rater kappa indicated that agreement amongst clinicians for the risk-level ratings was adequate for this study.

A chi-square analysis was conducted looking more specifically at the relationship between negative support severity (without or with positive support) and assessed risk-level. Vignettes featuring subjects with medium-high levels of negative support severity without positive support and also those featuring subjects with medium-high levels of negative support severity with positive support received a greater proportion of medium and high risk-level ratings than low risk-level ratings. Vignettes featuring subjects rated with low levels of negative support severity with positive support tended to receive more low risk-level ratings and less medium-high risk-level ratings. Vignettes featuring subjects with low levels of negative support severity ratings without positive support presented somewhat unusual results with respect to risk-level ratings. A brief explanation was provided for this result and it
is the aim to further highlight this unusual result within the discussion chapter. In summary, this analysis demonstrates that there is a significant interaction between negative support severity (without or with positive support) and assessed risk-level. It supports the proposed hypothesis that the level of negative social support (without or with positive support) would have a significant relationship with the risk-level assessments completed by clinicians. However, it is important to note that this is only one aspect of the proposed social support model.

Further chi-square analyses were conducted in order to more specifically examine the other interactions which were found to be significant as a result of the loglinear analysis. A significant interaction was found between negative support severity (without or with positive support) and total safety interventions (recoded). There were proportionately more recommendations in the high category (5-10) than the low category (1-4) for those vignettes in which there was a medium-high level of negative support severity (irrespective of presence positive support). It was noted that positive support may play a more influential role for those vignettes in which there were low levels of negative support and an explanation for this finding was proposed. A significant interaction was also found between assessed risk-level and total safety interventions (recoded). This interaction indicated that the higher the assessed risk-level, the greater was the number of total safety interventions recommended by clinicians.
CA and MCA analyses were conducted in addition to this chi-square analysis in order to determine whether there were particular safety interventions more likely to be associated with particular risk-levels. The CA and MCA analyses did in fact indicate that safety interventions, such as hospitalisation, respite care, medication and GP referral, were more closely associated with a high risk-level. In addition, they showed that other safety interventions, such as delayed appointments and telephone calls, were more closely associated with a low risk-level.

In accord with the third objective for this chapter, results from the qualitative analysis were presented. These results revealed the types of information that clinicians use when making safety recommendations (e.g., information relating to psychosocial stress, risk-level, support networks) and the decision-making process involved in making risk-level assessments and safety intervention recommendations (see Figure 4 and Figure 5). These findings are crucial in demonstrating that clinicians use both negative and positive support information, in addition to other risk factor information, when making their risk-level assessments and safety recommendations. As will be shown in Chapter 7, this finding is also another important contribution to the social support model and to the research on social support and suicidality.

The archival and vignette studies complement each other well in that they highlight the importance of different aspects of the social support model for acute assessment of and crisis intervention for suicidal youth. The archival study indicated that group
differentiation has a significant relationship with assessed risk-level and safety interventions; and the vignette study has demonstrated that social support (negative support severity (without or with positive support) has a significant relationship with risk-level assessment and safety interventions. The fact that these studies complement one another will be further discussed in the next chapter and an attempt will be made to integrate their findings. This integration will point to the need for a necessary revision to the proposed social support model.
7.1 Introduction

This chapter has four main objectives. The first objective is to present the results from the archival study and to relate these to the current literature on youth suicide. More specifically, the objective is to present background information (e.g., sample characteristics) in an effort to provide the framework for the discussion on the interrelationship between support, risk-level and safety interventions. It will be noted that the present findings support the research on youth suicide. The second objective is to integrate the results from the archival and vignette studies in order to demonstrate the need for a revised social support model. This discussion will include an indication of how data collected for this study suggest necessary amendments to the initially proposed model, as well as demonstrating the revised model’s contribution toward understanding the role of social support in clinicians’ assessments. A third objective is to highlight the methodological issues for this study and to consider how these issues might have impacted upon the results. The final objective of this chapter is to outline the implications of the social support model for youth suicide treatment and prevention, current services and procedures, and future research.

7.2 Risk Factors – Archival Study

With respect to gender, there was a significantly greater number of females in the sample of files selected for the archival study compared to the number of males. This finding could be explained in two ways: (1) the difference may have occurred by chance due to the selection procedures, and/or (2) the difference may be a true
reflection of what has been shown in both New Zealand’s statistics and the available research. Official statistics show that females are more likely to attempt suicide, whereas males are more likely to successfully complete suicide (Coggan, 1997; New Zealand Ministry of Health, 2000).

The attempter and ideator groups in this study were not found to differ by diagnosis based on the DSM IV (Axis 1-4). This finding seems to contradict research in which it was found that attempters showed higher rates of psychopathology than did ideators (Fergusson & Lynskey, 1995b; Pelkonen et al., 1997). Some of the studies reviewed also indicated that psychopathology was associated with both attempts and ideation (Garrison et al., 1991; Pelkonen et al., 1997). Once again, findings from the archival study seem to contradict the research literature, since the rate of psychopathology was not found to differ between the two groups. For both groups, Major Depression seemed to be the most common Axis 1 diagnosis. Similarly, several studies have demonstrated that depression is a common diagnosis amongst those who are at-risk of suicide (e.g., Andrews & Lewinsohn, 1992; Beautrais, Joyce & Mulder, 1998c; Brent et al., 1993). The majority of diagnoses made for both groups were under the Axis 1 (Clinical Disorders) and Axis 4 (Psychosocial and Environmental Problems) categories. About one-quarter of both groups received more than one Axis 1 diagnosis. There appeared to be no significant differences between them with respect to alcohol and drug misuse and abuse – behaviours which appeared to occur relatively infrequently in both groups.

One explanation for the previously discussed results could be that the findings recorded from the files are not a true reflection of the actual content of the acute
assessment. As such, it is difficult to know how accurate the description of the patient was, considering that the details were collated from the clinician’s perspective. A second explanation could be that these two groups were part of a population attending an outpatient psychiatric hospital programme and by their very nature were similar in that they were referred to the clinic for mental health problems.

It has been demonstrated that suicidal behaviours range from suicidal thoughts to death by suicide. Martin, Allison, Pearce, Cornelissen, Rafferty, Mead and Williams (1996; p.29) state that:

One of our own studies (Martin et al., 1995) ... showed that of 371 adolescents ... 104 (28.1% of the total sample) had thought of suicide at least once in the previous year. Of these 104 “thinkers”, 43 (11.3%) had thoughts of suicide, but 61 claimed to have planned an attempt. Of these 61 “planners”, 23 (6.3%) had only planned, but 38 (10.3%) had attempted at least once. Of the 38 attempters, 17 (4.6%) had attempted more than once and only 18 (47.4% attempters) had sought medical help.

This example well illustrates how different levels of suicidal behaviour overlap and is supported by the current study. The files examined (see Chapter 5) indicated that approximately half of the attempter group had previously thought about suicide, and that approximately half of the ideator group had previously attempted suicide.

Several stressors surrounding suicidal behaviour were indicated within the records referred to in this investigation. Research indicates that there are multiple risk factors
which need to be examined, in addition to any preceding stressor(s), when assessing suicide risk. Studies have shown that these risk factors can be classified into biological, social/demographic, family characteristics/childhood experiences, psychiatric morbidity and environmental factors (e.g., Beautrais, 1996; Berman & Jobes, 1991; Moscicki, 1995; Reynolds & Mazza, 1994; White, 1999).

Beautrais (1998) points out that there is usually a stressor(s) preceding the act or thought of suicide that helps us to understand why youth engage in such damaging behaviour. She also points out that it is necessary to understand the stressor in the context of all the other risk factors present. Beautrais (1998) concludes that precipitating factors for self-harm "occur in individuals who are vulnerable to suicidal behaviour because of the presence of other risk factors for suicidal behaviour, including exposure to adverse childhood circumstances and the presence of current psychiatric disorder" (p.6). In the present study, clinicians' reports indicated that the most common reason for engaging in suicidal behaviour was an argument with family members and/or friends. This finding seems to parallel the research on negative stressors and youth suicide (see Sandin et al., 1998). For example, Lewinsohn et al. (1996) recognise that negative psychosocial stress could be a possible causal contributor to suicidal behaviours in adolescents. In particular, negative family experiences, such as family conflict, have been emphasised (see Robbins, 1998; Spirito et al., 1989; Wagner, 1997).

Within the archival study, the files indicated that there were several other stressors which preceded the attempt or ideation. However, there were no significant differences between the groups with respect to these stressors. The stressors cited included: abuse, a break-up in a relationship, death of a close family member or
friend, school problems, parental separation, bullying, medical problems, moving, trouble with the law, religion, body image and financial problems. These findings are consistent with those of previous studies in that suicidal behaviour has been found to be preceded by a recent, stressful life event. Examples include interpersonal conflict or loss, and legal or disciplinary problems (see Brent et al., 1993; Rich, Fowler & Fogerty, 1990). Moreover, the results from the archival study confirm the results from the study by Rich et al. (1990) who examined life stressors for adolescent suicide victims in their sample. Examples of the stressors in the latter study included disciplinary actions taken against the adolescent, incidences of rejection and/or humiliation by others, moves to new environments, termination of friendships or relationships and arguments with friends or relatives. The implications for these findings from the archival study will be addressed in section 7.9.

As previously discussed, the findings of the archival study thus demonstrate that both groups share some risk factors which put them at increased risk of future self-harm. However, it is important to acknowledge that these groups (ideators and attempters) consisted of adolescents who presented to an outpatient clinic as a result of mental health concerns. This situation might account for why these similarities were found. The files examined also indicate that both groups report similar stressors preceding the suicidal behaviour. However, the interesting point to note here is that significantly more of the attempters reported fights with family members as a stressor preceding the suicidal behaviour than those in the ideator group. This raises the question as to whether the environment and the potential support (negative and/or positive) available within that environment play a crucial role in determining whether a person would choose to ideate or even to attempt suicide. Overall, the point to extract from this
discussion is that there is confirmation for the fact that these groups do share some similar risk factors (overlap).

7.3 Social Support – Archival Study

The archival study examined whether there were any similarities and/or differences between the ideators and attempters with respect to the presence of negative and/or positive support. This portion of the study helped to establish: (a) the presence of negative and positive support, (b) the reliability of the social support model concepts (e.g., positive support, negative support, negative support severity), and (c) how the presence of negative and positive support was related to risk-level assessment and safety recommendations within the proposed social support model. The examination was deemed to be essential in providing the framework for the vignette study. For instance, there was no significant difference found between between the attempter and ideator groups for the variable of negative support. It was concluded that perhaps the difference lay not in measuring the presence of negative support, but rather in measuring the severity of the negative support (e.g., low levels of negative support severity defined as a disagreement or fight; high levels of negative support severity defined as severe abuse).

7.3.1 (A) Negative Support and Negative Support Severity

Given that attempters show a more extreme form of suicidal behaviour than those who ideate, one might expect that they would experience a greater severity of negative emotional support (e.g., family conflict, abuse). The research on differences between those who attempt and those who ideate seems to support this observation (e.g., Dubow et al., 1989; Fergusson & Lynskey, 1995b; Kosky et al., 1990).
Support was found for the hypothesis that the severity of the negative support would be greater for the attempter group than the ideator group. An examination of clinicians' reports indicated that the attempter group experienced a greater degree of medium to high negative support severity compared to the ideator group. Although causality cannot be assumed at this point, it is possible to speculate that exposure to more severe forms of negative support (e.g., prolonged abuse) may trigger more severe forms of suicidal behaviour (e.g., attempting versus thinking about suicide). This result supports the findings from Dubow et al. (1989), Fergusson and Lynskey (1995b) and Kosky et al. (1990) in which similar experiences were reported.

Although a relationship between level of negative support severity and suicidal behaviour has been implied by the research on adverse family environments (see e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al., 1990), it has not been specifically labelled as such, nor has it been linked to social support conceptualisations. This study lends its originality to the development of a social support concept (negative support and negative support severity) incorporating the previously cited literature on family conflict, adversity and discord. Gaining a more comprehensive and integrated understanding of the various types and levels of negative support severity can assist in our understanding of whether clinicians use these various levels to prompt particular risk-level assessments and hence particular safety interventions – two main components of the social support model.
7.3.2 (B) Positive Support

Another component of the social support model is the argument that the presence of positive support would play a role in reducing the level of assessed risk and hence the total number of interventions considered necessary in order to ensure patient safety. Research suggests that positive support is one of a number of factors that buffer the impact of negative stressors (e.g., Maltsberger, 1996; Pritchard, 1995; Rak & Patterson, 1996). Considering that those who attempt suicide display a more extreme form of behaviour than those who ideate, it would seem logical to conclude that the attempter group would experience more severe levels of negative support and considerably less positive support compared to the ideator group.

Patient files indicated that there was a significantly greater presence of positive support for the attempter group compared to the ideator group - a finding contrary to that hypothesised. This unexpected finding could be a result of clinician bias in assuming that ideators are exposed to less extreme forms of negative support, thereby negating the need to enquire about positive support. This situation might lead to either a failure to record or under recording of the presence of positive support among ideators compared with suicide attempters.

It has been previously demonstrated that healthy adolescent development can be encouraged if support is available within the family unit (Frey & Rothlisberger, 1996) and that family cohesiveness can alleviate the risk of suicide in the young (Rubenstein et al., 1998). The findings of the archival study, coupled with those of previous research by Frey and Rothlisberger (1996) and Rubenstein et al. (1998), suggest two important conclusions: (a) that this study establishes a relationship between positive
support and safety interventions which has not previously been determined, and (b) that this study shows that clinicians use information about positive support, in addition to known risk factors, when making risk-level assessments and safety intervention recommendations.

7.4 Impairment and Risk-Level Measures – Archival Study

The results presented indicated support for the hypothesis that the attempter group would receive higher impairment and risk-level ratings than the ideator group. With respect to overall impairment and risk-level, it was found that the attempters received lower CGAS impairment scores than the ideators. Although the latter findings were found to be unreliable, the scale for suicide risk was found to be reliable. Attempters received significantly more medium to high risk-level ratings compared to ideators, a finding that supports the theoretical and empirical material available on suicide risk and assessment (e.g., Berman & Jobes, 1991; Fergusson & Lynskey, 1995b; Patterson et al., 1983; Reynolds & Mazza, 1994).

Interestingly, this study found that files indicated that the attempter group experienced both a greater degree of negative support severity, as well as received higher risk-level assessments compared to that of the ideator group. The result makes clinical sense in that studies show that those who attempt are generally exposed to a greater number of negative stressors than those who ideate, thereby putting them at greater risk of suicide (e.g., Berman & Jobes, 1991; Dubow et al., 1989; Fergusson & Lynskey, 1995b). However, it is important to note that this is not the only explanation as other factors (e.g., biological and psychosocial factors) may also be contributing to this pattern.
7.5 Safety Interventions – Archival Study

For the archival study, it was hypothesised that there would be a greater number of interventions implemented for those who attempted compared to the number of interventions for those who ideate. It would be logical for clinicians to take more safety precautions for those who have attempted suicide, as they are at greater risk. However, with one exception, no differences were found between these two groups with respect to either the types (e.g., medication) or total number of interventions. Across both groups, the most common interventions implemented for patients were the provision of emergency numbers, making another appointment and prescribing medication. This result is a matter of some concern in that it does not support a link between risk of suicide and the types of total safety interventions implemented – another component of the social support model. However, as will be discussed in more detail in section 7.6, the CA and MCA analyses from the vignette study indicated that there was a clear relationship between safety recommendations and their associated risk-levels. In addition, the chi-square analyses of risk-level assessment by safety recommendations (see section 6.5) also indicated a similar relationship. In particular, it was found that vignettes featuring subjects with higher risk-level assessments received proportionately more high category recommendations (i.e., interventions totalling 5 to 10) and those with lower risk-level assessments received proportionately more low category recommendations (i.e., interventions totalling 1 to 4). Interestingly, it was also shown that higher-order interventions (e.g., more crisis-oriented such as CYF referral or provision of emergency numbers) were recommended for those vignettes featuring subjects at higher risk of self-harm and lower-order interventions (e.g., less crisis-oriented such as delayed appointments) were recommended more for those at lower risk of self-harm.
These findings from the vignette study demonstrated that there was a relationship between risk-level and safety recommendations. Perhaps these relationships were uncovered in the vignette study rather than in the archival study because of the fact that the vignette study was better controlled. It is also possible that the relationship between risk-level and safety recommendations was not found to be significant in the archival study because of the methodological difficulties inherent in archival research, such as over- or under-reporting in clinician files and/or there could have been discrepancies between what was said in the actual interview and what was recorded by clinicians. In other words, it is possible that inaccurate or incomplete information contained in some patient files may outweigh any differences that could have been found between the attempter and ideator groups. Secondly, the two groups did appear to be similar on a number of variables, as evidenced by the results on sample characteristics (e.g., diagnosis, comorbidity, previous attempts, previous ideation, alcohol drug misuse/abuse). It is possible that these similarities may also have outweighed any differences that could have been found between the groups with respect to safety interventions.

7.6 The Social Support Model – Archival and Vignette Studies
This study was also interested in exploring the decision-making process for risk-level assessment and safety interventions. Prior to discussing the loglinear results from the archival and vignette studies, there will be an exploration of the decision-making process for risk-level assessment and safety recommendations. Following this exploration, there will be an integrated discussion of the results from the archival and vignette studies in relation to the proposed social support model.
7.6.1 The Decision-Making Process – Vignette Study

As previously noted in Figure 4, the reasons for recommending safety interventions were categorised into the following main areas: psychosocial stress, diagnosis, support networks, risk-level, plan and previous/recent attempt. The data indicated that the reasons given by clinicians for selecting particular safety interventions were directly related to the factors they used in making risk-level assessments. In other words, the reasons why clinicians choose particular safety interventions are directly related to the factors that predispose young people to self-harm (see Adams, Overholser & Spirito, 1994; Beutrais, Joyce & Mulder, 1996; Brent et al., 1993; Carris et al., 1996; De Man & Leduc, 1995; Fergusson & Lynskey, 1995a, 1995b; Maris, 1997; Molnar et al., 1998).

The data also indicated that, for clinicians, recommending interventions such as continuous monitoring of the young person, as depicted within the vignettes, was of the utmost importance in order to “ensure safety” and “reduce risk.” Berman and Jobes (1991) label this procedure as “crisis intervention and prevention.” Clinicians indicated that they would recommend other sources of support, such as other family members or friends of patients, to assist in the monitoring of the young person at home. For vignettes featuring subjects rated at a high risk-level, the clinicians tended to recommend a referral to an inpatient ward or a referral for respite care in order to ensure continuous monitoring. Almost all of the clinicians, demonstrating that they take the suicidal action seriously, indicated the need for outpatient monitoring and supervision in the case of each vignette, regardless of risk-level. Interestingly, these findings demonstrate that clinicians place priority on the important role that support plays when intervening with suicidal adolescents. In addition, it shows that the level
of risk does appear to determine the types of safety interventions recommended, particularly since closer monitoring and increased supports were recommended more for those vignettes featuring subjects with higher risk-level assessments.

The process by which clinicians made risk-level assessments and safety intervention recommendations was summarised in Figure 5. The data indicated that clinicians generally use clinical information contained within the vignettes to assist in making risk-level decisions. Clinical information appeared to represent all past and present information relevant to the patient's situation (e.g., diagnosis, family history of suicide, plan, impulsivity, intentionality, support systems), as depicted within the vignettes, and his/her presenting problem. Once a risk-level assessment was completed, the clinician utilised this information to recommend particular interventions – lower-order interventions for those at lower risk-level and higher-order interventions for those at higher risk-level, as was demonstrated in the Stelmachers and Sherman (1992) study.

This aspect of the study makes an important contribution to clinician accountability in that it demonstrates that clinicians employ a methodical approach to making risk-level assessments. It shows that clinicians use known risk factors when conducting risk-level assessments. In addition, it has important implications for the social support model, as will be discussed in the following paragraphs.

7.7 The Revised Social Support Model – Archival and Vignette Studies

Based on the theoretical principles of House and Kahn's (1985), Pierce et al.'s (1996), Thompson's (1995), and Vaux's (1988) social support conceptualisations and the
principles established from the research on adolescent suicide (see Chapter 2, section 2.8), it was argued that social support would play a role in clinicians' risk-level assessments. In addition, it was argued that information about both social support and risk-level would be related to the types of interventions chosen. For example, if minimal supportive behaviour, combined with negative appraisals of that support had been recorded in patient files, then one would expect a clinician to be more likely to rate that patient at a high risk-level and to propose a larger number of interventions. This scenario was illustrated to some extent in the Dicker et al. (1997) and Morrissey et al. (1995) studies, reviewed previously. However, these latter studies primarily focused on the decision to hospitalise.

The loglinear model results from the archival study indicated that there were several significant relationships between the following pairs of variables: group and assessed risk-level (recoded), group and positive support, group and negative support severity (recoded), and negative support severity (recoded) and total safety interventions (recoded). The relationships found to be significant in the vignette study confirmed the earlier findings reported from the archival study; that is: (a) the attempter group received ratings of higher levels of negative support severity compared to the ideator group, and (b) the attempter group was rated to be at a higher risk-level than the ideator group. As discussed previously, the findings from the archival study provided evidence for some of the relationships proposed in the social support model, in particular the relationship between negative support severity and total safety interventions. As expected, this relationship indicated that the lower the level of negative support severity, the fewer the number of safety interventions initiated. Positive support was not found to have an effect in the relationship between negative
support severity and safety interventions in the archival study, although it did to some extent in the vignette study. However, as discussed, this result could be due to the fact that a different measure of positive support was used (i.e., positive support and negative support severity were combined) in the vignette study and that the vignette study was more controlled than the archival study.

The vignette study demonstrated that there were significant relationships between the following pairs of variables: (a) negative support severity (without or with positive support) and assessed risk-level, (b) assessed risk-level and total safety interventions (recoded), and (c) negative support severity (without or with positive support) and total safety interventions (recoded). It will be shown in the following paragraphs that each of these interactions adds a new understanding to suicide risk assessment.

Based on the model, it was hypothesised that there would be lower risk-level assessments made by clinicians for those vignettes featuring subjects in which there was positive support present in addition to negative support severity compared to those in which there was no positive support present. As expected, it was shown that risk-level tended to increase along with higher levels of negative support severity. The presence of positive support in the medium-high levels of negative support severity did not appear to make any difference in the type of risk-level assessments made by clinicians. Overall, clinicians tended to make higher risk-level assessments for those vignettes in which there was a medium-high level of negative support severity, irrespective of whether positive support was present or not. There appeared to be lower risk-level assessments made when positive support was present in addition to
negative support, particularly for the low negative support severity with positive support category.

Interestingly, the vignette study showed that positive support appeared to play a more complex role than was previously hypothesised. It appears as if clinicians do not use the information related to positive support when making risk-level assessments and safety recommendations for those vignettes featuring subjects with a medium-high level of negative support severity (without or with positive support). It was proposed that perhaps clinicians find it difficult to detect any evidence of positive support, or even unconsciously fail to acknowledge it, due to the high level of negative support severity (e.g., severe abuse). This finding was unexpected and future research will be required to assess the relative importance that positive support plays in making risk-level assessments and safety recommendations.

Several studies have demonstrated that with increasing levels of family conflict, discord and adversity, a young person is more likely to be at risk of self-harm (e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al., 1990). An argument was made for the fact that conflict, discord and adversity actually represent various forms of negative support (see section 2.5). Research has demonstrated that positive support acts as a buffer to suicidal behaviour (see e.g., Maltsberger, 1996; Pinto et al., 1998; Pritchard, 1995; Rubenstein et al., 1998). Although this study confirms the previous research cited, it adds a new dimension to understanding suicidal behaviour by (a) providing a theoretical concept (negative support) for research on suicide which incorporates the research on family conflict, discord and adversity, and (b) assessing
the relationship that both positive and negative support have with suicide risk.

It is important to highlight that there was an unexpected finding in relation to the effect between negative support severity (without or with positive support) and risk-level assessment. As discussed previously, clinicians rated vignettes featuring subjects containing low levels of negative support severity without positive support as either low or high risk with only a few allocating medium risk-level ratings. This finding seems unusual because it was expected that these vignettes would more likely to have been rated by clinicians as low risk rather than high risk. This finding could be a result of the fact that positive support was purposefully omitted for these particular vignette subjects. It might therefore have resulted in fewer high risk-level ratings if positive support was present in addition to a low level of negative support severity, as can be evidenced in those vignettes featuring subjects with low levels of negative support severity with positive support.

It was also hypothesised that there would be a positive relationship between assessed risk-level and the type of interventions recommended by clinicians - a second component of the social support model. Results indicated that vignettes featuring subjects with higher risk-level assessments received proportionately more high category recommendations (5-10) and vignettes featuring subjects with lower risk-level assessments received proportionately more low category recommendations (1-4). Furthermore, it was found that higher-order interventions (i.e., more crisis-oriented interventions such as hospitalisation) were recommended for those vignettes featuring subjects at higher risk of suicide and lower-order interventions (i.e., less
crisis-oriented interventions such as delayed appointments) were recommended for
those at lower risk of suicide. These findings support the study by Stelmachers and
Sherman (1992) and also the study by Hendryx and Rohland (1997) in which patients
deemed at high risk often necessitated clinician decisions to hospitalise.

Interestingly, as indicated previously, several studies examining clinical outcomes
largely focused on the decision to hospitalise (e.g., Apsler & Bassuk, 1983; Dicker et
al., 1997; Engleman et al., 1998; Hendryx & Rohland, 1997; Morrissey et al., 1995).
Rudd and Joiner (1998) provide a framework for assessing and treating suicidal
behaviour (including provision of a list of safety interventions available to the
clinician) similar to that found in the present study, but offer their framework on a
conceptual level only. The relationship between risk-level assessment and specified
safety interventions, as found in the present study, adds a further dimension to
understanding suicidal behaviour in that it examines the many types of individual
interventions (other than hospitalisation) that clinicians recommend for young people
prompted by the risk-level assessment; a more specific focus than that shown in
available research (e.g., Apsler & Bassuk, 1983; Dicker et al., 1997; Engleman et al.,
1998; Hendryx & Rohland, 1997; Morrissey et al., 1995).

A third component of the social support model that may prove useful in assessing and
intervening with suicidal youth is the relationship found to exist between negative
support severity (without or with positive support) (recoded) and total number of
safety interventions (recoded). There were a greater proportion of high category
recommendations (5-10) made for those vignettes in which there were medium-high
levels of negative support (without or with positive support) compared to low
category recommendations (1–4). Overall, vignettes with a low level of negative support severity (without or with positive support) received proportionately more low category recommendations than high category recommendations. Examining the high recommendations category only, it is important to note that vignettes with low levels of negative support severity without positive support received proportionately more high category recommendations (17%) than those vignettes with low levels of negative support severity with positive support (10%).

These findings partially support the initial hypothesis in that it was also expected that there would be a greater proportion of high category recommendations made for those vignettes in which there were medium-high levels of negative support severity without positive support. However, it was noted that positive support did not appear to play a role when making recommendations for those vignettes in which there was a medium-high level of negative support severity. As discussed in Chapter 6, it is likely that the role of positive support in making recommendations is either minimised or even ignored by clinicians in situations where there is a presence of a medium-high level of negative support. It might be more difficult to detect or acknowledge a supportive relationship while exploring more traumatic issues (e.g., abuse). It is also possible that when clinicians make a risk-level assessment, they use this risk information to direct them to recommend a particular number and type of interventions, and consequently, do not rely as heavily on the presence of positive support.
It was previously demonstrated that there was evidence for a link between negative support severity and risk of suicide (see Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b; Hollis, 1996; Kosky et al., 1990), positive support and risk of suicide (see Maltsberger, 1996; Pinto et al., 1998; Pritchard, 1995; Rubenstein et al., 1998), and risk of suicide and safety interventions (specifically hospitalisation) (see Dicker et al., 1997; Morrissey et al., 1995; Stelmachers & Sherman, 1992; Hendryx & Rohland, 1997). This study contributes to the research cited in that: (a) it directly tested and found partial evidence for a relationship between negative support severity (without or with positive support) and safety interventions (both type and total number), not previously tested; and (b) it demonstrated that clinicians use information about support, in addition to risk-level, to prompt them to initiate certain safety recommendations. The importance of these findings for the assessment and treatment of youth suicide will be discussed in a later section of this chapter.

An unexpected result was found within the interaction between negative support severity (without or with positive support) and total safety interventions for the low total number of safety interventions category (1-4). Results showed that there were proportionately fewer safety interventions recommended in the low category (1-4) for those vignettes featuring subjects with a medium-high level of negative support severity with positive support compared to those with a low level of negative support severity with positive support. This finding is unexpected in that even with positive support present, it was still expected that those vignettes with a medium-high level of negative support severity would require proportionately more safety interventions than those with a low level of negative support severity. However, it is important to
note that the difference between these categories was minimal. Perhaps for those vignettes with low levels of negative support (regardless of whether positive support is present or not) clinicians generally recommend the standard type and number of recommendations (e.g., appointment, provision of emergency numbers, education about limiting method availability). Therefore, true differences in the type and number of recommendations tends to be reflected more in those vignettes featuring subjects with medium-high levels of negative support severity. That is, these vignettes would require a greater number and degree of safety interventions (“higher-order”) (e.g., hospitalisation, respite care) in addition to the standard safety interventions (e.g., provision of emergency appointments, education about limiting method availability).

The purpose of the discussion thus far has primarily been to demonstrate conceptually the relationships found to exist between: (a) negative support severity (without or with positive support) and assessed risk-level, (b) assessed risk-level and safety interventions, and (c) negative support severity (without or with positive support) and safety interventions. An integrated model, incorporating the findings from the archival and vignette studies, is necessary in order to demonstrate how these relationships work together. This model is conceptually similar to the originally proposed social support model with the minor exception of a few revisions. These revisions are as follows: (1) the indication of an unexpected finding within the interaction between negative support severity (without or with positive support) and risk-level assessments, (2) the indication of an unexpected finding within the interaction between negative support severity (without or with positive support) and total safety interventions, and (3) the integration of the negative support severity and positive support concepts to form a new concept labelled negative support severity.
Figure 6 incorporates the relationships described above (i.e., negative support severity (without or with positive support) and risk-level, risk-level and safety interventions; and negative support severity (without or with positive support) and safety interventions) in order to present an integrated and comprehensive social support model. As stated previously, the findings from the present study support the originally proposed social support model with the exception of a few unexpected results.

Reviewing the files from the archival study, it was found that some of the patients had been assessed acutely more than once for suicidality. Based on this finding, it is possible to speculate that when the support network dissolves or is not functioning in a healthy and positive manner (assuming it was functioning in a positive way as a result of previous implementation of intervention strategies), the adolescent may be at increased risk of self-harm. In the archival study, this situation might account for why some patients had re-presented to the service for an acute assessment. It may be that particular safety interventions influence the level and type of support which in turn influence the risk-level assessment. Certain safety interventions would then be recommended and implemented depending upon the risk-level assessment. As stated, the safety interventions might then influence the level and type of support available to the adolescent and so the cycle begins once again. It is important to note that this model is suggesting that negative support severity (without or with positive support)

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18 It is important to mention that one purpose of this diagram is to capture the overall relationships between the various levels of negative support severity (without or with positive support) and the associated risk-level assessments. Please note also that although risk was not recoded in the analysis, I have chosen to place the medium risk-level category closer to the high risk-level category, since it was previously demonstrated that they were more similar in meaning to one another compared to the low risk-level category. Also note that the arrows placed within the diagram infer causality. As mentioned previously, the statistical tests used in this study primarily tested for associations or relationships. However, it is possible to speculate about causality in the social support model based on current
Figure 6. Schematic representation of the relationship between “elements” of the revised social support model.

practice knowledge and the research reviewed in Chapter 2. Supporting arguments for the inferences made with respect to causality will be highlighted in the main text discussion.
does play an influential role in clinician decision-making for risk-level and safety interventions. However, it is not suggesting that the variable, negative support severity (without or with positive support) is the only variable which influences risk-level assessment and safety intervention recommendations. Clearly it has been shown previously (see footnote 2) that there are many risk factors which put youth at risk for future suicidal behaviour. An interesting point for future research to consider (as will be elaborated on in the section on future research) is utilising this model and testing the relative degree to which a variety of other known risk factors may influence risk-level assessment and safety recommendations.

As noted previously, causal conclusions cannot be made based on the data provided from the present study and due to the nature of the tests chosen (i.e., tests of association and relationships). However, it was argued previously that speculation about causality between negative support severity (without or with positive support), risk-level and safety interventions could be made based on the research presented in Chapter 2 and current practice knowledge. This model infers causality largely based on past research findings which indicate that: (1) there is a clear relationship between family conflict, adversity and discord and an increase in risk of suicide (see e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Hollis, 1996; Hurd et al., 1999; Kosky et al., 1990); (2) there is a clear relationship between a lack or loss of positive social support and heightened risk of suicide (see e.g., D’Attilio et al., 1992; DeMan & Leduc, 1995; DeMan et al., 1993; Eskin, 1992; Morano et al., 1993; Whatley & Clopton, 1992); and (3) social support was found to play a significant role in the decision to hospitalise suicidal adolescents (Dicker et al.,
1997; Morrissey et al., 1995). The first and second cited findings imply that presence of negative support (defined as conflict, adversity and discord) impacts upon the level of risk. The latter research finding implies that support (be it negative or positive) impacts upon the types of safety interventions recommended for suicidal adolescents. However, as previously discussed, it is likely that the interventions initiated could play a role in reducing the level of negative support severity. It seems obvious to also speculate that risk-level will influence safety interventions because research and practice knowledge demonstrates that certain risk-levels necessitate certain safety interventions (e.g., high risk then hospitalise, low risk then arrange weekly appointments on an outpatient basis) (see Apsler & Bassuk, 1983; Berman & Jobes, 1991; Engleman et al., 1998; Morrissey et al., 1995; White, 1999). Based on the directionality implied from the previously mentioned research, it seems obvious enough to suggest that the types and number of safety interventions would be dependent upon risk-level and not the reverse.

On a theoretical level, this model specifically reflects the clinicians’ appraisal of support when making risk-level assessments and safety recommendations. For example, the archival study used reports written by clinicians and the vignette study used questionnaires which were completed by clinicians. It is difficult to ascertain based on this study whether there would be any discrepancies between what the patient may perceive and what the clinician perceives as being unhelpful or helpful support. Again the appraisal of support from multiple perspectives is another area needing further investigation.
The social support model makes several important contributions to the research on social support and suicide by: (a) providing a rationale for a reliable and integrated concept for suicide research – namely, negative support and negative support severity, (b) assessing the relationship that both negative and positive support have with suicide risk-level, (c) examining the relationship between specific individual safety intervention recommendations (other than hospitalisation) and risk-level assessment, and (d) providing evidence of a relationship between negative support severity and recommended safety interventions, not previously tested. As indicated, these relationships have not been specifically addressed in the research on youth suicide to date.

7.8 Methodological Issues

Selection Bias

Selection bias refers to a situation in which those persons selected are not typical or representative of the larger population from which they have been chosen (Rubin & Babbie, 1993). Selection bias is an important consideration when undertaking research because, if present, it can limit generalisation of the results (Rubin & Babbie, 1993). Since a nonprobability selection procedure was used for this thesis, it is possible that the attempters and ideators in the archival study, and clinicians in the vignette study, were subject to selection bias. That is, that they may not have been a true representation of those young people attending the outpatient clinic (in the archival study), nor a true representation of the types of clinicians conducting acute assessments (in the vignette study). In accord with this possible limitation, future studies might want to consider a similar study, but using probability methods (simple
random sampling) instead. This point will be elaborated on in the section on future research.

**Data Collection Methods**

Conducting archival research on case records (assessment notes) is a difficult task largely because there may be discrepancies between what was relayed in the interview by the client and what the clinician actually recorded. Indeed, it is likely that clinicians only recorded information that they felt was important at the time – a bias known as selective deposit (Keppel, Saufley & Tokunaga, 1992). A second difficulty related to the data collection methods in the archival study was that of group differentiation. The limited availability of information in the reports put constraints on the identification and definition of the groups involved. More specifically, it should be noted that information on intention of self-harm was largely unavailable from the records. Nevertheless, the definitions for attempting and ideating were of use since this study found some differences between the attempter and ideator groups – namely with respect to negative support severity, positive support and risk-level.

With respect to the archival study, there were several limitations surrounding the selection of files which may have influenced the data collected. For the archival study, some of the patients had been assessed acutely more than once at the same clinic. It was not uncommon for the same patient to have been assessed acutely at one stage for ideation and at a later stage for an attempt. Due to the total population pool being relatively small to choose from, some of these patient files had to be used. However, it is important to note that no files appeared in both groups for the archival study. If the patient had been assessed more than once, the most recent assessment
was chosen largely due to the improvement of clinical recordings and the availability of clinical information, resulting from the use of more standardised forms. In an attempt to avoid researcher bias, files in which the researcher was also the acute assessor were omitted from this study.

The vignette study also contained an inherent limitation in its data collection method. That is, the use of vignettes created a situation in which the acute assessment event was simulated. Therefore, the clinician responses may not have been a true reflection of what actually would happen in a clinical setting. Although the vignettes were fictitious, every effort was made to ensure that they resembled the types of situations which present to the CAFS clinic for acute assessment. Future research examining the decision-making process associated with clinicians' risk-level and safety recommendations may want to consider using taped interviews of real patients rather than a vignette method in order to address the above limitation. Based on the taped interview, clinicians could then be asked to rate risk-level and recommend appropriate interventions. Of course, issues such as anonymity and confidentiality would need to be considered and addressed.

Data collected for the vignette study indicated that a quarter of the sample (n=8) may have misunderstood the question "How did you get to reach that decision (list the steps you took when making the cognitive choice)" in the qualitative portion of the study. These clinicians either left the question blank or wrote "see above" indicating that they would supply the same answer for both question 1 (List the top three reasons for choice of safety recommendations) and question 2. It is difficult to say whether the replies from those eight clinicians would have influenced the results. Future
researchers may want to consider wording the question in a slightly different way, as well as providing an example, to prevent any confusion. For example, the question could be worded as follows: "List the steps that you took (by corresponding order) to recommend the appropriate safety interventions for this vignette (e.g., 1. Used patient background information, 2. Risk-Level Decision, 3. Used information from 1 and 2 to recommend safety interventions). Alternatively, perhaps the item could be reworded as follows: "Outline the process by which you made your decision for the safety recommendations."

**Coding and Statistical Analyses**

Another potential limitation of the present study concerns the coding of negative support severity (without or with positive support). The present coding indicates that negative support severity is measured along a scale from (1) representing low negative support severity without positive support to (6) representing high negative support severity with positive support. This scoring system implies a measure of intensity. However, the scoring used in this study indicates the reverse; that is, a score of 3 would be assigned to the category high negative support severity without positive support, whereas a score of 6 would be assigned to the category high negative support severity with positive support. The difficulty here is that the category high negative support severity with positive support is actually less severe than the category high negative support severity without positive support. Therefore, future studies may wish to consider an alternative coding system (see footnote 7, Chapter 4). This categorical coding scheme would also prevent any possible confusion arising from using a scale measure for this variable. The coding system used in the present study would not have
seriously compromised the results since the data collected on this variable were largely analysed according to categories and not by mean scale scores.

With respect to statistical analyses, small sample restrictions were problematic for the vignette study, thereby placing further restraints on statistical analyses. However, this limitation was accommodated for statistically by recoding the data into smaller, more manageable units. Future researchers might want to consider conducting a similar study with a sample drawn from a larger pool of clinicians, as a means of increasing the cell counts and consequently the power of the statistical tests.

**Reliability**

A final limitation concerns reliability. With the exception of the CGAS ratings for the attempter group, interrater reliability for the archival study was very strong. Results using the CGAS for the attempter group were accordingly interpreted with due caution. Reliability for the vignette study was adequate according to Dunn’s (1989) kappa statistic. This finding is in contrast to earlier studies which reported lower kappas due to the level of disagreement between clinicians when making decisions on risk and safety (see e.g., Apsler & Bassuk, 1983; Engleman et al., 1998; Stelmachers & Sherman, 1992; Way et al., 1998). However, Stelmachers & Sherman (1992) were able to show an increase in interrater reliability when standardised techniques were offered to clinicians. It was for this reason that a risk-level guideline was employed in both the archival and vignette studies to assist in reducing variability and increasing reliability with respect to decision-making.
Despite the above limitations, the study as a whole has many important strengths, among which is its ability to assist in improving practice accountability. The following section will address the implications of the archival and vignette studies for youth suicide treatment and prevention, current or proposed services and procedures and future research.

7.9 Implications and Future Research

Perhaps the most important strength of this project lies in its description and retrospective examination of a clinical adolescent outpatient sample in the area of mental health in New Zealand. Apart from the work completed by Beautrais (1998), Beautrais, Joyce and Mulder (1994, 1996, 1998a, 1998b, 1998c), Coggan (1997) and Coggan et al. (1998), Fergusson and Lynskey (1995a, 1995b), little research has been conducted in this country on a clinical outpatient population or on the practice of mental health clinicians. In these terms, this study provides the groundwork for the future examination and exploration of clinician decision-making for risk-level assessment and safety intervention recommendations. It applies both inductive and deductive approaches to the examination of the relationships between support, risk-level and safety interventions and the results point to implications in the following areas: (1) youth suicide prevention and treatment; (2) current or proposed services and procedures with respect to adolescents at-risk of self-harm; and (3) future research.

(1) Youth Suicide Treatment and Prevention

The findings from this study demonstrate that social support (negative and positive support) plays an important role in the assessment of, and recommended interventions for, suicidal behaviour. For example, if there is a lack of positive support or if there is
a high level of negative support severity, then it has been shown that clinicians will opt for particular safety interventions in order to address this deficit. Clinicians indicated, both from the quantitative and qualitative analyses, that strengthening the support system, as well as addressing the level of negative support severity (e.g., abuse) were critical components of the intervention process. In situations where there was some positive support, clinicians opted to use family members or friends to assist in continuous monitoring of the young person outside of the agency’s domain. In situations where the risk was high and there was no positive support available from family and/or friends, safety interventions such as hospitalisation, respite care and referral to CYF for a placement were seen as ways of both building up the support network, as well as providing a message to the young person that a safe and supportive environment was the first step in reducing risk.

This study demonstrates that clinicians perceive positive support as playing a vital role in their risk-level assessments and when recommending safety interventions. Since studies have shown that positive support acts as a buffer to suicidal behaviour (e.g., Maltsberger, 1996; Pinto et al., 1998; Pritchard, 1995; Rubenstein et al., 1998) and that clinicians perceive risk as less when positive support is present, it can be concluded that treatment for those at-risk needs to focus on strengthening support systems and building support systems where they do not exist. For example, a peer support programme in which young people can turn to others of their own age for support during difficult times, particularly in situations where they have no one else to talk to about their problems, may be useful. This type of programme could be useful if established within local area high schools or community centres which young people frequent.
Another matter is that of early detection of mental health issues and referral to appropriate services. The majority of attempters and ideators in this study had an Axis I diagnosis (e.g., depression, anxiety) with approximately a third in both the attempter and ideator groups experiencing comorbidity. Although the archival study was based on records for an outpatient psychiatric group, it has been found that psychiatric conditions, particularly if comorbid, enhance the prospect of at-risk behaviour (see Andrews & Lewinsohn, 1992; Fergusson & Lynskey, 1995a, 1995b; Flisher, 1999; Pirkola, Marttunen, Henriksson, Isometsae, Heikkinen & Loennqvist, 1999; Renaud, Brent, Birmaher, Chiappetta & Bridge, 1999). In addition, Beautrais (1996) states that “adverse life courses and difficulties appear to play very strong roles in determining attempted suicide risk” (p.238). Kosky and Goldney (1994) support Beautrais’ comment in that they state the need to address two areas in suicide prevention: (1) the role of psychiatric illness and (2) the contextual significance of interpersonal and family discord. If these factors predispose the young to engage in self-harm behaviour, then it certainly seems logical to conclude that more resources need to be put into developing specialist psychiatric services and inpatient programmes for adolescents. In addition, it might also be logical to conclude that more resources need to be put into educating the public, school personnel and mental health professionals about early detection of both potential suicidal behaviour and mental health issues. Education about the risk and protective factors and how to identify a potentially suicidal young person, as well as the process involved in making an appropriate referral to services, is another avenue for the prevention and treatment of suicidal behaviour. Overall, an integrated approach involving community services, the school, parents and professional services would assist in the early detection and prevention of mental health issues (including suicidal behaviour).
(2) Current or Proposed Services and Procedures

The results from this thesis may assist in improving clinician and service accountability via the creation of more consistent ways of recording client information, particularly in terms of crisis intervention. With respect to policy, the new guidelines produced by Beautrais et al. (1997) imply that consistency across schools and mental health services is the first step to creating a more accountable and helpful service for those youth at-risk. In this context, the proposal to refine assessment procedures within the CAFS service has become an increasing concern and is being taken seriously by both management and staff. A package similar to that introduced by Project ABLe, could be introduced with respect to safety planning.19 For example, a standard checklist of interventions (e.g., emergency numbers, referral to CYF etc.) could be introduced as part of the risk factor assessment package.

Presently, the form only allows for a half page documentation for recording the treatment offered. However, more research would need to be undertaken in order to devise a standard safety list, particularly as to how certain safety measures relate to diagnosis.

The desirability of using standard safety protocols, in addition to standard assessment procedures, for clinicians and the community is another implication arising from the

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19 Project ABLe introduced a standard assessment package and risk form to be utilised by clinicians for assessing those at-risk of harm to self or others. Project ABLe, an acronym for “Achieving the Better Life,” was launched in 1996 and led to the initiation of standardised documentation for efficient record keeping within the mental health services in 1997. “A Better Life” was the 1994 report of the Greater Wellington Mental Health Services Review by the Central Regional Health Authority (Diana Kane, Sr. Clinician, CAFS, personal communication, April 19, 2000). One example of this standardised documentation is the assessment package and risk form utilised by the CAFS multidisciplinary team during an acute assessment. It requires the clinician to record details of the client’s presentation, the Mental Status Examination, risk factors, presenting problem, relevant background information, self-harm assessment, mental health history, current medicines, medical history, alcohol/drug abuse, cultural assessment and needs, relevant information from other sources, legal history, family relationships and structure, developmental history, formulation and summary of issues, provisional diagnosis and treatment/intervention plan (only if accepted for treatment).
results of this study. Standard assessment procedures are clearly ways of increasing clinician and service accountability, as well as ways of improving the quality of treatment offered. Standardised procedures ensure that clinicians both record and consider all possible interventions, as well as justifying why they chose to recommend particular safety interventions. The present study indicates that particular interventions are more likely to be recommended for particular risk-levels, with “higher-order” interventions recommended by clinicians for those vignettes relating to people at higher risk (e.g. hospitalisation, respite care) and “lower-order” interventions (e.g. delayed appointments and telephone calls) recommended by clinicians for those vignettes featuring subjects where the person concerned is judged to be at lower risk. These findings demonstrate that certain risk-level assessments prompt the implementation of certain safety interventions. Standard safety protocols across mental health services should consider not only the necessary interventions that clinicians must follow through with under certain circumstances (e.g., CYF referral for abuse), but also the interventions that may be required (with a given risk-level) to improve the quality of life and mental well-being of adolescents at-risk.

Interestingly, the CYF agency has recently issued a booklet entitled “Towards Well-being: Responding to the Needs of Young People” (Department of Child, Youth and Family, 2000). This booklet is an important part of the Youth Services Strategy in New Zealand that is currently being introduced and evaluated. The booklet includes great detail with respect to how to make a risk-level decision and how to develop and record a suicide risk management plan. A similar documentation system would also greatly benefit CAFS clinicians and their clients, although this system would need evaluation as to its effectiveness.
The results of this thesis also have important implications with respect to the training and in-service professional development of clinicians. Knowing that such factors as social support, be it positive or negative, play an important role in assessing and treating youth at-risk, mental health services and the government need to allocate funding and resources for the development of assessment and intervention skills in this area (Anderson, 1999). Specialised courses and/or programmes, specifically aimed at teaching crisis assessment and intervention skills, could be developed and implemented within the mental health services, as well as within academic settings. These courses could also assist in keeping clinicians up to date with current literature in the area. With this point in mind, the results from this study will be feedback to CAFS staff in Wellington. This feedback is itself a form of in-service professional development that will foster greater awareness of how social support plays a role in the types of risk-level assessments and safety recommendations made by clinicians make and the process that occurs when they make these decisions. Dissemination of the results from this study to CAFS staff, journals and conferences is the first step in promoting education about youth suicide assessment and treatment in New Zealand (see Smith and Anderson, 2000).

(3) Future Research

Future researchers may wish to consider using random sampling techniques (which permit the generalisation of results) and a larger sample in an effort to continue testing the model. Perhaps future research could sample several child and adolescent mental health clinics and use a random sample of files from those clinics in order to achieve a representative sample of youth at-risk. In addition, future studies might consider obtaining a random sample of clinicians from several clinics in order to be able to
generalise the results. In the vignette study, negative support severity (without or with positive support) was shown to have a significant relationship with risk-level assessment and recommended safety interventions. A relationship was also found between assessed risk-level and recommended safety interventions. Future research could therefore examine whether other risk variables besides social support (e.g., family history of suicide, psychopathology) also play a critical role in the decision-making process for risk-level and associated safety interventions. A larger, multimodal study utilising a number of variables (e.g., support, family history of suicide and psychopathology), while controlling for others, may assist in helping us to understand how and why clinicians reach their decisions regarding future risk.

For the future also it is important to begin directing attention toward programme evaluation of crisis assessment and intervention procedures and protocols. The Project ABLe assessment package introduced in 1999 requires further research regarding its efficacy in improving assessment techniques and preventing at-risk behaviour. Since findings from the present study indicate that clinicians favour certain interventions given the perceived risk-level of the patient, it is also critical to determine whether these favoured interventions have a positive outcome (i.e. reducing future at-risk behaviour). Follow-up studies could be conducted in which patients are assessed at frequent intervals to determine whether the interventions recommended had a positive outcome for the young person.

In addition to the above, future research should focus on analysing whether positive support acts as a protective factor in preventing suicide. Building on this result, the measurement of positive support by using other individual items (such as
communicating to another person that they are being listened to or telling someone that they are loved) may help to identify whether some positive support items have more or less of an influence on clinician decision-making for risk-level and safety. Perhaps a focus not only on positive support, but on wider protective factors such as youth employment opportunities, preventive education efforts on the adversity of alcohol/drug abuse/misuse and school programmes aimed at improving self-esteem could be assessed as to their relative importance in both reducing and preventing suicidal behaviour. Baume and McTaggart (1998) agree with this focus and argue for the need for more research on not only the short- and long-term risk factors, but also, in the case of Australia, for research on protective factors in relation to youth suicide. In addition, further investigation into risk factors and protective factors in New Zealand is also necessary.

On a larger scale, it is critical to also consider the issue of suicide in the context of wider social and economic factors. For example, future research may need to consider what type of socio-economic and demographic environments are commonly associated with dysfunctional families. In other words, issues such as poverty and social violence (vandalism, gangs) need to be more specifically addressed in terms of their relationship to the personal risk factors previously discussed (e.g., diagnosis, psychiatric history in the family). Prevention therefore needs to be focused not only on clinical intervention (e.g., crisis intervention, cognitive behavioural and family therapy) but also on social intervention, such as through the elimination of poverty and unemployment. In summary, the critical point here is that while this thesis focused on the support system provided by friends and family, future studies might
consider assessing the relative effect of wider systems and their impact on at-risk behaviour.

7.10 Conclusion

This chapter provided an integrated discussion of the findings from the archival and vignette study and related these findings to the current literature on youth suicide. More importantly, this chapter demonstrated the need for a revised social support model largely due to the nature of the findings reported. The discussion clearly showed (a) how the revised model was schematically different from the original social support model, and (b) the important contribution the revised social support model has for research on youth suicide. Final discussion centred on the methodological issues relating to the present study, as well as the important implications this study has for youth suicide treatment and prevention, current services and procedures, and future research.

An important issue to conclude with is the future outlook for both research and the assessment and treatment of suicidal youth. As discussed previously, more attention needs to be directed toward examining the relative importance that social support has for assessing and treating suicidal youth. In particular, past research has largely focused on the examination of risk factors for suicidal behaviour in the young, including negative support (see e.g., Beautrais, Joyce & Mulder, 1996; Brent et al., 1994; Campbell et al., 1993; Fergusson & Lynskey, 1995b, Hollis, 1996; Kosky et al., 1990). Research now needs to direct its attention toward assessing the importance that positive support may have in protecting adolescents against self-harming behaviour. This study shows that positive support plays a more complex role in risk-level
assessment and safety recommendations for suicidal youth than was initially hypothesised. A critical factor in this research would be determining whether various forms of positive support actually do serve to reduce risk of future self-harm behaviour. More important is the implication that information about positive support can be used to develop programs (e.g., self-esteem, communication, relationship-building) for young people which may serve to prevent suicidal behaviour and other mental health disorders. However, programme evaluation studies would also have to be conducted in order to fully assess the effectiveness of such programmes.

Finally, looking toward the future, a critical issue worthy of consideration is how clinicians can more effectively assess and treat suicidal behaviour. Obviously, researching whether current programmes are effective in this area would be a good beginning. However, it is important to consider alternative methods of treating young people and how services can become more flexible in order to reach out to those adolescents who might under normal circumstances not be treated. A specialised team of clinicians trained in suicidology could be incorporated into current child and adolescent mental health teams. Furthermore, flexibility could be improved by making these specialised teams available to young people 24 hours a day, 7 days a week. The important point to conclude with here is that attention needs also to be directed toward how services can better meet the needs of those youth who might never be seen by a mental health agency.

Suicide is an alarming and ever-increasing problem in today's world (New Zealand Ministry of Health, 2000). Suicide is a tragic outcome for some and for others it can be a beginning, particularly in terms of accessing help after an attempt and receiving
the appropriate treatment. With research, we can raise awareness through public
education and hopefully better equip parents, adolescents and professionals (whether
they be school teachers or mental health clinicians) to understand how to recognise
warning signs for potential suicidal behaviour and how to assist in offering support to
those who are ultimately at-risk.
References


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Appendix A
Coding Guide and Scoring Sheet for Archival Study

1. **Group**

“Attempters” will be defined as a person who presents with the intent to die, and sufficient lethality in method use to accomplish that intent, but either failed or were rescued. Examples of attempters include those persons who present at the acute assessment phase with some attempt made at self-harm (e.g., overdose, cutting, attempted hanging, etc.) (Reynolds & Mazza, 1994).

“Ideators” will be defined as persons who have cognitions about wanting to die. These people experience thoughts related to the planning, conduct and outcome of suicidal behaviour (Reynolds & Mazza, 1994). They present primarily to CAFS for an acute assessment because of their verbal and/or written expressions of wanting to harm themselves.

Please circle on the coding sheet which group the client belongs to.

2. **Age**

Record the actual age as seen on the referral form. Age range for this study is 13-17 years of age inclusive.

3. **Gender**

Circle on the coding sheet either male or female as seen on the referral form.
4. Diagnosis

**Axis 1: Clinical Disorders**

*Other Conditions That May Be a Focus of Clinical Attention*

**Axis 2: Personality Disorders and Mental Retardation**

**Axis 3: General Medical Conditions**

**Axis 4: Psychosocial and Environmental problems**

The Diagnostic Criteria Manual from DSM-IV will be provided in order to assist with this section. Please circle the appropriate axis(es) for each record. If the diagnosis is explicitly stated in descriptive terminology (e.g., “there seems to be some conflict between the parents and patient”), then make the diagnosis that is most appropriate (e.g., parent-child relationship – Axis 4).

5. Comorbidity

Comorbidity is defined as the presence of more than one diagnosable disorder within Axis 1. Circle yes if there is more than one disorder for a client under the Axis 1 category and no, if there is mention of only one disorder under the Axis 1 category.

6. Social Support

6.1 Emotional – General Definition of Emotional Support

Defined as behaviour that communicates to an individual that he or she is cared for and loved. A few examples of emotional support include having a person(s) available to listen to one’s problems in an open and nonjudgemental way, having someone to rely on for help, having someone who will be available to spend time with, and having someone who will make one feel valued. The implicit assumption within this
definition is that the emotional support being assessed is of a positive quality. The recipient of that emotional support may perceive it as either negative or positive depending upon the timing, amount and mode of supportive behaviour that occurs. It is possible that the recipient may perceive the emotional support as being not available to him or her from the support network (e.g. family or friends) or it may be perceived as dysfunctional or unhelpful in which case the emotional support would be seen as negative, or perhaps even nonexistent (Pierce et al., 1996; Thompson, 1995; Vaux, 1988).

(a) Negative Emotional Support

Negative emotional support can encompass (a) the existence of dysfunctional or unhelpful support; or (b) the nonexistence of support. Examples of the former would include references within the report to such items as:

- people who abuse the young person (physical, emotional, sexual); which also includes bullying
- people who the young person finds difficult to trust
- people who communicate with the young person in a dysfunctional way (e.g. fights, conflicts)
- people who will not listen to the young person’s problems or difficulties
- people who cannot be relied on for help
- people who do not want to spend time with the young person

These items were constructed from the research on family conflict, social support and youth suicide (Beautrais, Joyce & Mulder, 1990; Campbell, Milling Laughlin & Bush,
Examples of other instances of negative emotional support would include references within the report to situations in which the young person cannot access any support, whether it be from friends, family or community groups. Negative support, as written in the report, can involve references to both past and present experiences of the patient in so far as they may possibly affect their current functioning (e.g., sexual abuse over a number of years which the patient is only now remembering and cites as a reason for them attempting or thinking about suicide).

Please circle either “mentioned” if the report does make reference to negative support or “not mentioned” if the clinician does not make any reference in the assessment report to negative support. Please also mention your reasons if you chose that negative emotional support was mentioned in the report.

(b) Positive Emotional Support

Examples of positive emotional support include:

- having someone who will listen when needing to talk about a problem(s) or difficulty
- having someone who will provide advice/guidance in a difficult situation
- having someone to rely on for help
- having someone to spend time with
- having someone who will provide comfort, whether it is a crisis situation or not
- having someone who will accept them openly and for who they really are
These items were constructed based on the Social Support Behaviour Scale (SSB) (Vaux et al., 1987) and the Social Support Questionnaire (SSQ) (Sarason, Basham & Sarason, 1983; Vaux, 1987).

Please circle “mentioned” if the assessment report does make reference to positive support or “not mentioned” if there is no reference made to positive emotional support in the acute assessment report. Please also list your reasons if you chose positive emotional support as mentioned in the report.

6.2 Negative Support Severity Rating

Please also make a severity rating based on the above data for negative emotional support. Please circle “low”, “medium” or “high” severity on the coding sheet.

Examples of low severity would include such things as conflicts or fights or general “hassles” with friends or family and would result in little or no impairment in the following areas: school, work, home and social relationships. Examples of medium severity would include serious conflicts, fights bullying and/or abuse (physical, sexual, emotional and verbal) from others such that it would result in some impairment in at least one of the following areas: school, work, home and social relationships. Examples of high severity would include such things as severe trauma, abuse or neglect such that it would result in serious impairment in more than one functioning area (e.g., school, work, social and family relationships). Each of these definitions takes into account both the type of conflict (e.g. fight, argument or abuse), as well as its impairment on the other person (Chaffin, Wherry, Newlin, Crutchfield & Dukman, 1997; Straus, 1979).
6.3 Emotional – Submeasure of Support Source

The following is a list of definitions for support source:

Friends will be defined as any reference made in the report to that client’s peer group or family’s extended social group.

Family will be defined as any reference made in the report to that client’s immediate and extended family network.

Community agencies/groups can be defined as those groups to which a young person belongs to which are outside of the friends and family sphere. These groups include such things as youth groups (connected to a church or religion), or can include community agencies such as Youth One Stop Shops, Youth Aid Officers, CYPFS (Children, Young Persons and Their Families Service) or guidance counsellors available to young people at their secondary school.

(a) Negative Emotional Support Source

Circle “Mentioned” if there is any reference made to negative emotional support from the following groups in the report: friends, family or community groups. Otherwise, circle “Not Mentioned”.

(b) Positive Emotional Support Source

Circle “Mentioned” if there is any reference made to positive emotional support from the following groups in the acute assessment report: friends, family or community groups. Otherwise, circle “Not Mentioned”.

7. Quantity of Support

7.1 Number of Support Network Resources

If there is any reference to the actual number of support network resources available to the young person, please record it as written in the report (e.g. a group of 10, 20 etc.).

If there is no actual number, please circle "Mentioned" if there is any reference in the report to any of the following groups:

- a large group
- a medium-sized group
- a small group
- no group

Otherwise, circle "Not Mentioned".

A large group will be defined as one in which there are written references to "a lot" or "many" people with whom the young person interacts with. The report may even go so far as mentioning explicitly that the client has a large number of people for whom they can turn to in a time of need.

A medium-sized group will be defined as one in which there are written references to "some", "several" or a "moderate" group of people for whom the young person can turn to when in need of support.
A small group will be defined as one in which there are written references to a “few” or “little” people to whom the young person can turn to when in need of support.

No group refers to whether there is a reference in the report about the young person having no one within their network resource to turn to for support.

8. Coding for Risk Level

8.1 Risk Level – Measure #1 CGAS Children’s Global Assessment Scale

The CAFS clinic now utilises the CGAS in order to obtain a more global measure of functioning for at-risk adolescents. The CGAS is a useful measure of overall severity of disturbance and is used for children and adolescents from 4-16 years of age. Read the assessment report in its entirety and taking all information into consideration, please assign a value according to the following scale. Only consider that information which describes recent events within the previous month.

CGAS (for children 4-16 yrs. of age)

Rate the subject’s most impaired level of general functioning for the specified time period by selecting the lowest level which describes his/her functioning on a hypothetical continuum of health-illness. Use intermediary levels (eg, 35, 58, 62).

Rate actual functioning regardless of treatment or prognosis. The examples of behaviour provided are only illustrative and are not required for a particular rating.

Specified Time Period: 1 mo

100-91 Superior Functioning in all areas (at home, at school, and with peers); involved in a wide range of activities and has many interests (eg, has hobbies or participates in extracurricular activities or belongs to an organised group such as Scouts etc); likeable, confident; everyday worries never get out of hand; doing well in school; no symptoms.

90-81 Good Functioning in all areas; secure in family, school, and with peers; there may be transient difficulties and everyday worries that occasionally get out of hand (eg mild anxiety associated with an important exam, occasionally “blowups” with siblings, parents or peers).

80-71 No more than slight impairment in functioning at home, at school, or with
peers; some disturbance of behaviour or emotional distress may be present in
response to life stresses (eg parental separations, deaths, birth of a sibling), but
these are brief and interference with functioning is transient; such children are
only minimally disturbing to others and are not considered deviant by those
who know them.

70-61 Some difficulty in a single area, but generally functioning pretty well (eg
sporadic or isolated antisocial acts, such as occasionally playing hooky or
petty theft; consistent minor difficulties with school work; mood changes of
brief duration; fears and anxieties which do not lead to gross avoidance
behaviour; self-doubts); has some meaningful interpersonal relationships;
most people who do not know the child well would not consider him or her
deviant but those who do know him or her well might express concern.

60-51 Variable functioning with sporadic difficulties or symptoms in several but
not all social areas; disturbance would be apparent to those who encounter
the child in a dysfunctional setting or time but not to those who see the child
in other settings.

50-41 Moderate degree of interference in functioning in most social areas or severe
impairment of functioning in one area; such as might result from, for
example, suicidal preoccupations and ruminations, school refusal and other
forms of anxiety, obsessive rituals, major conversion symptoms, frequent
anxiety attacks, poor or inappropriate social skills, frequent episodes of
aggressive or other antisocial behaviour with some preservation of meaningful
social relationships.

40-31 Major impairment in functioning in several areas and unable to function in
one of these areas; ie, disturbed at home, at school with peers, or in society at
large, eg persistent aggression without clear instigation; markedly withdrawn
and isolated behaviour due to either mood or thought disturbance, suicidal
attempts with clear lethal intent; such children are likely to require special
schooling and/or hospitalisation or withdrawal from school (but this is not a
sufficient criterion for inclusion in this category).

30-21 Unable to function in almost all areas; eg, stays at home, in ward, or in bed all
day without taking part in social activities or severe impairment in reality
testing or serious impairment in communication (eg sometimes incoherent or
inappropriate).

20-11 Needs considerable supervision to prevent hurting others or self (eg,
frequently violent, repeated suicide attempts) or to maintain personal hygiene
or gross impairment in all forms of communication, eg, severe abnormalities
in verbal and gestural communication; marked social aloofness, stupor, etc

10-1 Needs constant supervision (24 hr care) due to severely aggressive or
self-destructive behaviour or gross impairment in reality testing,
communication, cognition, affect or personal hygiene.

(Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird & Aluwahlia, 1983)

8.2 Risk-Level - Measure #2

Risk level will be considered as a continuous variable and will be defined in relation
to three categories, such as referring to whether a person is at low, medium or high
risk. The criteria for these definitions have been compiled from several typologies which exist within the suicide research on risk-level (see e.g., Berman and Jobes, 1991; Patterson et al., 1983; Kral and Sakinofsky, 1994; Sommers-Flanagan and Sommers-Flanagan, 1995).

Decide on the risk-level according to the definitions provided and circle either low, medium or high according to the definitions below. Please use information related to the suicidal behaviour of the patient both in the past, as well as in the present.

**Low Risk**: A person at low risk will be defined as someone who makes vague references to suicide, has no or a very poorly detailed plan, access to any methods of self-harm are unattainable or very limited, and choice of method to self-harm is not well-detailed or planned. For example, “jumping off a bridge”, “hanging self”, “taking pills” or “lying on train tracks” are considered to be poorly detailed in that the person has either not yet obtained the methods or not thought through the methods in a deliberate and detailed fashion. Generally, persons in this category do not know when they might follow through with their plan, and have not yet obtained the methods to self-harm.

**Medium Risk**: A person at medium risk will be defined as someone who has considerable ideation and the beginnings of a plan to self-harm, access to any methods of self-harm are moderately attainable, and choice of method to self-harm is planned or detailed. If the person is an ideator, they have generally thought through their plan in a detailed manner and have actually obtained the methods to self-harm. If the
person has already used a method of self-harm (attempted), then it would be seen as moderately lethal (e.g. superficial cutting, some pills taken).

**High Risk:** A person at high risk will be defined as someone who has a well-detailed and thought out plan, their access to any methods of self-harm are very attainable, and their choice of method used was very lethal (e.g. hanging, overdose of pills, severe lacerations from cutting).

9. Coding for Safety Recommendations

9.1 Circle “Mentioned” if any reference is made in the acute assessment report with respect to the following recommendations:

- Hospitalisation – patient admitted to or granting continuance on an inpatient ward for further monitoring following acute assessment
- CYPFS – Referral to Children, Young Person’s and Their Families Service
- Respite Care – nursing care arranged by CAFS for the child and their family overnight.
- Provision of Emergency Numbers (PERT – Psychiatric Emergency Response Team for after hours and CAFS number for during office hours 8:30-5:00)
- Time-Out Placement for a Night – informal arrangement made by the family for the young person to have a break from their family either for a night or a few days. Some time-out placements include staying with an extended family member or with a family friend.
- Time-Out Placement for Several Days – same as above except length of stay spans over a number of days rather than a night.
• Limiting of Method Availability – instruction given by the clinician to the parents or caregivers about eliminating means of self-harm from the immediate environment (e.g. hiding or locking away of pills, medicines, poisons, knives, or guns)
• Medication as prescribed by the psychiatrist at CAFS
• Internal Referral for further specialist consultation on the MDT (Multi-Disciplinary Team) at CAFS (e.g. psychiatric consultation, cognitive assessment and/or psychological testing)
• Referral to External Agency or Organisation (e.g. Youth Aid Officer, One-Stop Shops, Access to a Guidance Counsellor at school).
• Next Planned Appointment for client to see therapist.
• Next Planned Telephone Contact between client and therapist.
• Other – Please record any other decisions made which were not included in the above list e.g., parent keeping a watchful eye, no safety plan mentioned (or mentioned but not specified).

9.2 Safety Recommendations – Measure of Time Specificity for Appointment

Circle “Mentioned” if there is reference in the assessment report to any of the following categories:

• Appointment within 24 hours.
• Appointment by the end of the week.
• Appointment the following week.

Otherwise, circle “Not Mentioned”.
9.3 Safety Recommendations – Measure of Time Specificity for Telephone Call.

Circle “Mentioned” if there is reference in the assessment report to any of the following categories:

- Telephone Call within 24 hours.
- Telephone Call by the end of the week.
- Telephone Call the following week.

Otherwise, circle “Not Mentioned”.

10. Please circle “Mentioned” if there is any reference made to the following risk factors as written in the assessment report:

- abuse of alcohol and/or drugs – defined as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12 month period:

  (1) recurrent substance use resulting in a failure to fulfill major role obligations at work, school or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions or expulsions from school; neglect of children or household)
  (2) recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)
  (3) recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)
(4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication; physical fights)

(American Psychiatric Association, 1994, p.112)

- misuse of alcohol and/or drugs – defined as engaging in excessive drinking and/or drug-taking primarily to escape from one’s problems (e.g., drinking to get drunk at parties). Generally, adolescents who misuse often report needing to drink excessively with friends to fit in, as well as to avoid facing difficult issues.

- past suicide attempts

- past suicidal ideation

- psychiatric history within the family

Otherwise, circle “Not Mentioned”.

11. List any environmental stressors which may have acted as triggers for the suicidal behaviour. Some examples may include abuse, separations within the family, trauma, arguments or fights with others (family, friends), and many others.

12. For those who have attempted prior to the acute assessment, please circle “Mentioned” if there is any reference made to the following methods: pills, cutting, attempted hanging or other. If there is another method, please write down exactly what was used in the attempt made. Otherwise, circle “Not Mentioned”.

Please circle Not Applicable (NA) if the patient you are reviewing initially presented as an acute with primary concerns of suicidal ideation.
13. For those who have the presence of ideation at the time of the acute assessment, please circle “Mentioned” if there is any reference made to the specificity of the plan. Otherwise, circle “Not Mentioned”. Please circle NA if the patient you are reviewing initially presented as an acute with primary concerns of suicide attempt.
CODER'S SHEET

1. Group
   Circle one: Attempter / Ideator

2. Age
   ______ Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made:

   ______________________
   ______________________
   ______________________

5. Comorbidity
   Circle one: Yes / No

6. Social Support
6.1 Emotional – Submeasure of Relationship Quality
   (a) Negative Emotional Support
      Circle one: Mentioned / Not Mentioned
      Reasons:
      ______________________
      ______________________
      ______________________
      ______________________

   (b) Positive Emotional Support
      Circle one: Mentioned / Not Mentioned
      Reasons:
      ______________________
      ______________________
      ______________________
      ______________________
6.2 Negative Support Severity

Circle one: None / Low / Medium / High

6.3 Support Source

(a) Negative Emotional Support Source

Circle one for friends: Mentioned / Not Mentioned
Circle one for family: Mentioned / Not Mentioned
Circle one for community: Mentioned / Not Mentioned

(b) Positive Emotional Support Source

Circle one for friends: Mentioned / Not Mentioned
Circle one for family: Mentioned / Not Mentioned
Circle one for community: Mentioned / Not Mentioned

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) =

Record a score based on the following categories:

Circle one for “Large” Group: Mentioned / Not Mentioned
Circle one for “Medium” Group: Mentioned / Not Mentioned
Circle one for “Small” Group: Mentioned / Not Mentioned
Circle one for “No” Group: Mentioned / Not Mentioned

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score =

8.2 Risk-Level – Measure #2

Circle one: Low / Medium / High
9. Safety Recommendations

9.1 Decisions

1. Hospitalisation: Mentioned / Not Mentioned
2. CYPFS: Mentioned / Not Mentioned
3. Respite Care: Mentioned / Not Mentioned
4. Provision of Emergency Phone Numbers: Mentioned / Not Mentioned
5. Time-Out Placement For a Night: Mentioned / Not Mentioned
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

Please list any other disposition decisions made that are not included in the above list:


9.2 Time Specificity for Appointment

1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number


9.3 Time Specificity for Telephone Call, whether from client to counsellor or
counsellor to client.

1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned

3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number __________.

10. Other Risk Factors

1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned

2. Alcohol and/or Drug Misuse: Mentioned / Not Mentioned

3. Previous suicide attempts: Mentioned / Not Mentioned

4. Previous suicidal ideation: Mentioned / Not Mentioned

5. Psychiatric history within the family: Mentioned / Not Mentioned

11. List any environmental stressors which may have triggered the suicidal behaviour: (e.g., death, separation in family, trauma, abuse, argument, fight)

____________________________

____________________________

____________________________

12. For those who have attempted prior to the acute assessment, please circle the following for method use:

Not Applicable

1. Pills: Mentioned / Not Mentioned

2. Knife: Mentioned / Not Mentioned

3. Hanging: Mentioned / Not Mentioned

4. Other: (please state) Mentioned / Not Mentioned

13. For those who have presented with suicidal ideation, please circle the following for plan specificity (e.g., type of plan):

Not Applicable

Mentioned / Not Mentioned
Appendix B

Case Studies for Training
CHILD ADOLESCENT AND FAMILY
SERVICE ASSESSMENT

REferred by:

Permission to Contact? GP

MHA or CJA?
If Yes specify section:

CLIENT NAME:
Surname
Given

D.O.B.
NHI

1. ***
WHO ATTENDED
Names and Roles

SESSION 1
Date

Debbie Smith
Pukatevo

Check box to indicate that purpose for collecting information and intended use has been discussed with client

SESSION 2
Date

Debbie Smith
Pukatevo

SESSION 3
Date

Debbie Smith
Pukatevo

2. PRESENTATION ***

Susan presented as a well-mannered, well-dressed young woman. She was appropriately dressed for the weather and occasion.

Susan, however, found it difficult to maintain eye contact during the interview. She also seemed to have limited insight into her emotional problems and how this impacts upon her behaviour.

She was able to answer most questions put tentatively in an appropriate way.

3. MENTAL STATUS EXAMINATION (MSE) ***

Does client require a Mental Status Examination? Yes No

MSE completed and included

4. RISK ASSESSMENT ***

Does client have any moderate or serious risk factors? Yes No

If YES, a Risk Management Plan and an MSE must be completed.

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PAGE 1

Continuation sheet used
Susan stated that she was feeling suicidal again and communicated to her guidance counselor and doctor that she wanted to kill herself.

1. Suicidality - Susan said that she has thought about self-harm a lot lately following the break-up of a relationship with a boy. She has attempted previously twice - once when she swallowed 6 anti-inflammatory pills over an argument with her dad regarding curfew time and another time she took a handful of paracetamol following an argument with a friend. These incidents happened 2 years ago and no one knew about them. She did not go to A+E, but made herself sick so she could throw up the pills. Susan has no current specific plan to self-harm, but stated that she feels so sad she wants to self-harm.

2. Depression - Susan stated that she feels very sad (Tardive; 10 being very sad). She stated that she has felt like this for the last month since the break-up of a relationship with a boy. Susan has had problems sleeping (wakes 2-3x night) for the last month and her appetite has become somewhat suppressed. She also complains of chronic fatigue. She reports a difficulty in concentrating at school. Susan's family stated that they have noticed this deterioration over the last month and were concerned when they heard about her wish to die.
6. RELEVANT BACKGROUND INFORMATION ***
CYPS involvement, exposure to trauma/abuse/violence, recent life changes.

No CPS involvement. No exposure to violence etc. Only recent life change indicated is the break up of a relationship with a boy.

7. SELF-HARM ASSESSMENT - include alcohol & drug use ***
Suicidal ideation - triggers, thoughts, inhibitors
Actions - description of attempt, method used, where, when, why. What did they hope the attempt would change?
History - describe other attempts and triggers. Hospital or other agency involvement?


Two previous attempts about two years ago: 1) took 6 anti-inflammatory pills and 2) handful of paracetamol. No one was aware of these incidents. Trigger for these incidents - argument with a family member.

Some alcohol use (drinks at parties) but no drug usage.
Seemingly depressed, difficulties sleeping and eating.
8. MENTAL HEALTH HISTORY ***
Diagnoses, past treatment, response to treatment, previous CAFs, or other Mental Health services.

No previous数码 involvement.

Family history of depression (men, brother, and father).

9. CURRENT MEDICINES ***
Psychotropic and other medication, dose, compliance, response and efficacy.

N/A.

10. MEDICAL HISTORY
Previous illnesses, past medications, allergies to medications, head injury, hospitalisations.

Appendix operation age 6 - in hospital for 4 days.

Most childhood illnesses (chicken pox + measles).

11. ALCOHOL AND/OR DRUG - current use and history ***
Specify substances, amounts and frequency.

Drinks alcohol mainly at parties (beer, vodka) and mild drink to get drunk. No drugs.

12. CULTURAL ASSESSMENT AND NEEDS ***
Include spirituality and religion.

Not applicable.
13. RELEVANT INFORMATION FROM OTHER SOURCES - always identify source ***

eg. School, Specialist Education Services, Guidance and Learning Unit.

Average student at Tawa College.

14. LEGAL HISTORY

Custody issues, Forensic, Police, Youth Justice contact.

Nil

15. FAMILY/WHANAU

Client's place in family/whanau structure, client's perception of family relationships, genogram, check for family/whanau history of psychiatric illness, drugs, alcohol/violence, separations, physical, sexual or emotional abuse

![Family Tree Diagram]

Susan has arguments with her family (mainly maternal) around rules, expectations and sometimes curfew. Susan said that she generally gets along with her younger sister and brother. Susan feels that her parents don't respect her privacy. She also said that the family tends to be quite isolated and has little to do with the extended family.

David said that he came from a disadvantaged background and witnessed a lot of violence between his parents. He said he was emotionally abused as a child. (Sue)
DEVELOPMENTAL HISTORY

16. CONCEPTION / PREGNANCY / ADOPTION

Sustained normal birth, no complications. Assigned Sts 6 and 2 when born, transferred until 6 months.

17. INFANCY, EARLY CHILDHOOD

Include milestones, language, significant losses, separations.

Recalled all developmental milestones at normal age. No significant family losses or separations. Separation anxiety when Susan first went to kindergarten, but seemed to adjust well after that.

18. SCHOOL

Include academic performance, attendance changes, use of teacher aide, Specialist Education Service, Guidance and Learning Unit, peer and teacher relationships.

Kindy from 3-4 yrs - separation anxiety. Eventually made friends. No concerns here otherwise.
5-12 yrs Intermediate. Average student, some close friends.
13- Present - College. Average student. Decline in social relationships.

19. INTERESTS, HOBBIES, SPORTS

Enjoys netball and karate.
Susan still seems to be very depressed in light of a recent break-up with a boyfriend. In response to this, she seems to be contemplating suicide, but has no specific plan. Susan said that it is the reaction of her parents which has stopped her from doing anything. Susan appears to be at low-risk for self-harm.

Susan also seems to be having some relationship problems and communication problems which seem to be a natural consequence in reaction to normal adolescent development.

There does seem to be a family history of mental illness in the family which may put Susan at risk for further depression and suicidality.

---

**21. PROVISIONAL DIAGNOSIS (only complete if accepting for treatment by the Mental Health Service)***

<table>
<thead>
<tr>
<th>Number Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>296.2x</td>
<td>Major Depressive Disorder, Single Episode</td>
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25/03/98  
PAGE 7  
Continuation sheet used
22. ☑ ACCEPT FOR TREATMENT BY CAFs

RECOMMENDED INTERVENTIONS:

1. CBT for depression
2. Family therapy for communication problems
3. Education re: limiting means to self-harm
4. Provision of Emergency phone numbers
5. Appointment arranged for next week

23. ☐ DECLINE FOR TREATMENT BY CAFs ***

REASON:

---

Referred to | Phone/Fax/letter | Date | By Whom | Designation
---|---|---|---|---

24. ASSESSMENT SIGN OFF - co-signed by Supervisor if required ***

Print Clinician Name | Sign | Designation | Date:
Derren Smith | D. Smith | Social Worker | 25/03/98

Print Supervisor Name | |

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CODER'S SHEET

1. Group
   Circle one: Attempter / Ideator

2. Age
   ___ Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: Major Depressive Disorder
   Panic-Child Relationship

5. Comorbidity
   Circle one: Yes / No

6. Social Support
   6.1 Emotional – Submeasure of Relationship Quality
      (a) Negative Emotional Support
         Circle one: Mentioned / Not Mentioned
      (b) Positive Emotional Support
         Circle one: Not Mentioned

6.2 Negative Support Severity
   Circle one: None / Low / Medium / High

6.3 Support Source
   (a) Negative Emotional Support Source
      Circle one for friends: Mentioned / Not Mentioned
      Circle one for family: Mentioned / Not Mentioned
Circle one for community: 
(b) Positive Emotional Support Source

Circle one for friends: 
Circle one for family: 
Circle one for community: 

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) = N

Record a score based on the following categories:

Circle one for “Large” Group: 
Circle one for “Medium” Group: 
Circle one for “Small” Group: 
Circle one for “No” Group: 

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score = 5

8.2 Risk-Level – Measure #2

Circle one: Low / Medium / High

9. Safety Recommendations

9.1 Decisions

1. Hospitalisation: 
2. CYPFS: 
3. Respite Care: 
4. Provision of Emergency Phone Numbers: 
5. Time-Out Placement For a Night: 

Mentioned / Not Mentioned
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

9.2 Time Specificity for Appointment
1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number

9.3 Time Specificity for Telephone Call, whether from client to counsellor or
counsellor to client.
1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned
3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number

10. Other Risk Factors

1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned
2. Previous suicide attempts: Mentioned / Not Mentioned
3. Previous suicidal ideation: Mentioned / Not Mentioned
4. Psychiatric history within the family: Mentioned / Not Mentioned
11. List any environmental stressors which may have triggered the suicidal behaviour:
(e.g., death, separation in family, trauma, abuse, argument, fight)

- break up with boyfriend

12. For those who have attempted prior to the acute assessment, please circle the following for method use:

1. Pills: 
   - Mentioned / Not Mentioned

2. Knife: 
   - Mentioned / Not Mentioned

3. Hanging: 
   - Mentioned / Not Mentioned

4. Other: (please state) 
   - Mentioned / Not Mentioned

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:

- Mentioned / Not Mentioned

- Not Applicable
CODER'S SHEET

1. Group
   Circle one: Attempter / Ideator

2. Age
   14 Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: Major Depressive Disorder, Single Episode, Parent-Child Relational Problem

5. Comorbidity
   Circle one: Yes / No

6. Social Support
   6.1 Emotional – Submeasure of Relationship Quality
   (a) Negative Emotional Support
      Circle one: Mentioned / Not Mentioned
   (b) Positive Emotional Support
      Circle one: Mentioned / Not Mentioned
   6.2 Negative Support Severity
      Circle one: None / Low / Medium / High
   6.3 Support Source
      (a) Negative Emotional Support Source
         Circle one for friends: Mentioned / Not Mentioned
         Circle one for family: Mentioned / Not Mentioned
(b) Positive Emotional Support Source

Circle one for friends:  
Circle one for family:  
Circle one for community:

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) = N/A

Record a score based on the following categories:

Circle one for "Large" Group:  
Circle one for "Medium" Group:  
Circle one for "Small" Group:  
Circle one for "No" Group:

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score =

8.2 Risk-Level – Measure #2

Circle one: Low / Medium / High

9. Safety Recommendations

9.1 Decisions

1. Hospitalisation:  
2. CYPFS:  
3. Respite Care:  
4. Provision of Emergency Phone Numbers:  
5. Time-Out Placement For a Night:
6. Time-Out Placement For a Few Days:  
   - Mentioned / Not Mentioned

7. Limiting of Method Availability:  
   - Mentioned / Not Mentioned

8. Medication:  
   - Mentioned / Not Mentioned

9. Referral for Specialist Services on MDT at CAFS:  
   - Mentioned / Not Mentioned

10. Referral to External Agency or Organisation:  
    - Mentioned / Not Mentioned

11. Next Planned Appointment:  
    - Mentioned / Not Mentioned

12. Next Planned Telephone Call:  
    - Mentioned / Not Mentioned

Please list any other disposition decisions made that are not included in the above list:

9.2 Time Specificity for Appointment

1. Appointment within 24 hours:  
   - Mentioned / Not Mentioned

2. Appointment by the end of the week:  
   - Mentioned / Not Mentioned

3. Appointment the following week:  
   - Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number

9.3 Time Specificity for Telephone Call, whether from client to counsellor or counsellor to client.

1. Telephone call within 24 hours:  
   - Mentioned / Not Mentioned

2. Telephone call by the end of the week:  
   - Mentioned / Not Mentioned

3. Telephone call by the following week:  
   - Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number

10. Other Risk Factors

1. Alcohol and/or Drug Abuse:  
   - Mentioned / Not Mentioned

2. Previous suicide attempts:  
   - Mentioned / Not Mentioned

3. Previous suicidal ideation:  
   - Mentioned / Not Mentioned
4. Psychiatric history within the family:  
   Mentioned / Not Mentioned

11. List any environmental stressors which may have triggered the suicidal behaviour:  
   (e.g., death, separation in family, trauma, abuse, argument, fight)  
   - Break up of relationship

12. For those who have attempted prior to the acute assessment, please circle the following for method use:
   1. Pills:  
      - Mentioned / Not Mentioned
   2. Knife:  
      - Mentioned / Not Mentioned
   3. Hanging:  
      - Mentioned / Not Mentioned
   4. Other: (please state)  
      - Mentioned / Not Mentioned

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:  
    - Mentioned / Not Mentioned
**CHILD ADOLESCENT AND FAMILY SERVICE ASSESSMENT**

**REFERRED BY:**

A: C PER

Permission to Contact? GP

**CLIENT NAME:**

Surname: Write

Given Names: Jane

D.O.B. 04/03/83

NHI: M174013

---

### 1. ***

**WHO ATTENDED**

<table>
<thead>
<tr>
<th>Names and Roles</th>
<th>ASSESSOR(S)</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family (mother, sister and Jane)</td>
<td>Debbie Smith</td>
<td>Puketino</td>
</tr>
</tbody>
</table>

---

**SESSION 1**

Date: 04/03/83

---

**SESSION 2**

Date: 04/03/83

---

**SESSION 3**

Date: 04/03/83

---

### 2. PRESENTATION ***

Jane seemed to be well-groomed and appropriately dressed. She was wearing a t-shirt with one arm bandaged as a result of a recent attempt.

She maintained little eye contact throughout the interview.

She sat hunched over with her head hanging down and seemed to be quite withdrawn.

She answered some but not all questions. It was difficult to ascertain why there was some resistance.

---

### 3. MENTAL STATUS EXAMINATION (MSE) ***

Does client require a Mental Status Examination? Yes No

MSE completed and included

---

### 4. RISK ASSESSMENT ***

Does client have any moderate or serious risk factors? Yes No

If YES, a Risk Management Plan and an MSE must be completed.

---

CAFAS Assessment 25/03/98

PAGE 1

Continuation sheet used
5. PRESENTING PROBLEM - describe current situation ***

Include: Duration, Intensity, Frequency, Parent's/Client's perception of problem

1. Suicide - Jane recently cut her arm with the razor from a pencil sharpener. The cut was very deep and required about 8 stitches. Jane has tried to cut herself many times previously, particularly on the wrist. Jane has been suicidal for the last 4 months and has cut herself a total of 4 times. Jane could not explain why she felt the need to cut herself but that she said it made her feel better. Jane cut herself last night and was seen by PERC.

2. Depression - Jane said that she feels very low in mood and has done so for the last 2 years. She said over the last 3 weeks she has begun to feel sedentary daily basis. She takes 2-3 naps to fall asleep and wakes 2-3x a night. She said that she tends to overeat now (comfort eat) when she feels sad.

3. Sexual Abuse - Jane's mother said that Jane was sexually abused by her father, this happened over a period of 2 years and involved intercourse. She said CPS were involved, he was charged and sent to prison. It happened when she was 6 years old.
6. RELEVANT BACKGROUND INFORMATION ***
CYPS Involvement, exposure to trauma/abuse/violence, recent life changes.

CYPs were involved last year when Jane's former partner was sentenced and sent to prison. Jane was sexually abused by her stepfather from 6 until she was about 4 years old. The abuse involved sexual intercourse and touching. This was the main trigger for the cutting.

7. SELF-HARM ASSESSMENT - include alcohol & drug use ***
Suicidal ideation - triggers, thoughts, inhibitors
Actions - description of attempt, method used, where, when, why. What did they hope the attempt would change?
History - describe other attempts and triggers. Hospital or other agency involvement?

Attempts - cut herself last night and it involved 8 strokes, previous she had cut herself about 4 times previously. Jane was clear in the interview that she wanted to die and did not want to live anymore. Jane reported feeling depressed over the last 2 years. Jane's mother said the possible trigger would be the trauma she experienced as a child.

PERT was involved and have been involved on a number of occasions.

She named herself, Jane, as the time, as she said it numbed the pain. She does not use drugs. Jane tends to drink only when she can get alcohol (once a month).

Jane stated that she thinks about dying on a frequent basis.
**8. MENTAL HEALTH HISTORY ***

Diagnoses, past treatment, response to treatment, previous CAFs, or other Mental Health services.

Jane had been seen previously by CAFS (about last year). Jane was diagnosed with major depression. She eventually dropped out of therapy.

**9. CURRENT MEDICINES ***

Psychotropic and other medications, dose, compliance, response and efficacy.

N/A

**10. MEDICAL HISTORY***

Previous illnesses, past medications, allergies to medications, head injury, hospitalisations.

N/A

**11. ALCOHOL AND/OR DRUG - current use and history ***

Specify substances, amounts and frequency.

Drinks about once a month to "dull the pain". Drinks at parties with friends in order to get drunk.

**12. CULTURAL ASSESSMENT AND NEEDS ***

Include spirituality and religion.

N/A
13. RELEVANT INFORMATION FROM OTHER SOURCES - always identify source ***

eg. School, Specialist Education Services. Guidance and Learning Unit.

Below average in college over the last year. Decline in performance over the last year.

14. LEGAL HISTORY

Custody issues. Forensic, Police, Youth Justice contact,

Mother has sole custody. Father charged with sexual abuse and currently in prison.

1.5. FAMILY/WHANAU

Client’s place in family/whanau structure, client’s perception of family relationships, genogram, check for family/whanau history of psychiatric illness, drugs, alcohol/violence, separations, physical, sexual or emotional abuse.

Jane sexually abused by father over several years. The abuse involved both intercourse and touching. Mark is in prison now for the abuse. Cups are still supporting the family.

Sue divorced from Mark about 4 years ago once she heard about the disclosure by Jane to a teacher.

Cups is currently intervening. Mary is concerned that perhaps something may have happened to her.

Jane has very conflictual relationships with mother and siblings.

CAFS Assessment
25/03/98

PAGE 5

Continuation sheet used
### DEVELOPMENTAL HISTORY

#### 16. CONCEPTION / PREGNANCY / ADOPTION

Difficult birth except delivery. Weighted 3 kilograms. Breastfed until 8 months.

#### 17. INFANCY, EARLY CHILDHOOD

Include milestones, language, significant losses, separations

- Late walker (about 1.5 years) but normal with walking (1 year).
- Major trauma/re-abuse from 6 until 9 years age.

#### 18. SCHOOL

Include academic performance, attendance changes, use of teacher aide, Specialist Education Service, Guidance and Learning Unit, peer and teacher relationships.

- Below average functioning at school over the last year which may be related to exposure to early trauma.
- Kindy 3-5 no difficulties. Intermediate (6-12 years) began having problems, became withdrawn and had difficulties in making friends.
  - These problems have persisted into college.

#### 19. INTERESTS, HOBBIES, SPORTS

- Netball.
Jane seems to be very depressed and at high risk for suicide. These problems appear to be related to some trauma which happened in her childhood (sexual assault).

Jane appears to have a significant mental health issue finding it difficult to trust her ex-partner because she still blames her mother for her treatment.

Jane could not guarantee her safety, we agreed to the following plan:

1. PERT protocol for after hours and telephone for Jane
2. Follow-up session by the end of the week.
3. Education about imipramine and availability.
4. Psychological consultation and current medication
5. Arrange to assess by end of week

---

### 21. PROVISIONAL DIAGNOSIS (only complete if accepting for treatment by the Mental Health Service) ***

<table>
<thead>
<tr>
<th>Axis</th>
<th>Number Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis I</td>
<td>309.81</td>
<td>PTSD</td>
</tr>
<tr>
<td></td>
<td>296.30</td>
<td>Recurrent major depressive disorder.</td>
</tr>
</tbody>
</table>

Axis II

Axis III

Axis IV  

Axis V  

Current GAF or CGAS
OUTCOME OF ASSESSMENT: ACCEPT OR DECLINE

22. ☑ ACCEPT FOR TREATMENT BY CAFs

RECOMMENDED INTERVENTIONS:
1. CBT for depression
2. Educate on limiting inappropriate sexual behavior
3. Revision of emergency numbers
4. Referral for psychiatric consult.
5. Arrange for follow-up by end of week.

23. ☐ DECLINE FOR TREATMENT BY CAFs ***

REASON:

Referred to | Phone/fax/letter | Date | By Whom | Designation
--- | --- | --- | --- | ---

24. ASSESSMENT SIGN OFF - co-signed by Supervisor if required ***

Print Clinician Name
Debbie Smith

Print Supervisor Name

Designation:
Social Worker

Date: ---
CODER'S SHEET

1. Group
   Circle one: Attempter / Ideator

2. Age
   ___ Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: PTSD
   MOOD
   Abuse of a child

5. Comorbidity
   Circle one: Yes / No

6. Social Support

6.1 Emotional – Submeasure of Relationship Quality
   (a) Negative Emotional Support
       Circle one: Mentioned / Not Mentioned
   (b) Positive Emotional Support
       Circle one: Mentioned / Not Mentioned

6.2 Negative Support Severity
   Circle one: None / Low / Medium / High

6.3 Support Source
   (a) Negative Emotional Support Source
       Circle one for friends: Mentioned / Not Mentioned
       Circle one for family: Mentioned / Not Mentioned
Circle one for community:  
(b) Positive Emotional Support Source

Circle one for friends:  
Circle one for family:  
Circle one for community:  

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) = ___________

Record a score based on the following categories:

Circle one for "Large" Group:  
Circle one for "Medium" Group:  
Circle one for "Small" Group:  
Circle one for "No" Group:  

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score = 34

8.2 Risk-Level – Measure #2

Circle one: Low / Medium / High

9. Safety Recommendations

9.1 Decisions

1. Hospitalisation:  
2. CYPFS:  
3. Respite Care:  
4. Provision of Emergency Phone Numbers:  
5. Time-Out Placement For a Night:  

Mentioned / Not Mentioned
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

9.2 Time Specificity for Appointment
1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number __________.

9.3 Time Specificity for Telephone Call, whether from client to counsellor or counsellor to client.
1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned
3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number __________.

10. Other Risk Factors
1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned
2. Previous suicide attempts: Mentioned / Not Mentioned
3. Previous suicidal ideation: Mentioned / Not Mentioned
4. Psychiatric history within the family: Mentioned / Not Mentioned
11. List any environmental stressors which may have triggered the suicidal behaviour: 
(e.g., death, separation in family, trauma, abuse, argument, fight)

trauma
abuse

12. For those who have attempted prior to the acute assessment, please circle the following for method use:

1. Pills: Mentioned / Not Mentioned
2. Knife: Mentioned / Not Mentioned
3. Hanging: Mentioned / Not Mentioned
4. Other: (please state) Mentioned / Not Mentioned

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:

Mentioned / Not Mentioned
CODER'S SHEET

1. Group
   Circle one: (Attempter) / Ideator

2. Age
   15 Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: PTSD, Trauma, Major Depressive Disorder.

5. Comorbidity
   Circle one: Yes / No

6. Social Support

   6.1 Emotional – Submeasure of Relationship Quality
      (a) Negative Emotional Support
         Circle one:  
         (b) Positive Emotional Support
         Circle one: 

   6.2 Negative Support Severity
         Circle one: None / Low / Medium / High

   6.3 Support Source
      (a) Negative Emotional Support Source
         Circle one for friends:  
         Circle one for family: 
Circle one for community:

(b) Positive Emotional Support Source

Circle one for friends:
Circle one for family:
Circle one for community:

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) =

Record a score based on the following categories:

Circle one for “Large” Group:
Circle one for “Medium” Group:
Circle one for “Small” Group:
Circle one for “No” Group:

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score =

8.2 Risk-Level – Measure #2

Circle one: Low (Medium / High)

9. Safety Recommendations

9.1 Decisions

1. Hospitalisation:
2. CYPFS:
3. Respite Care:
4. Provision of Emergency Phone Numbers:
5. Time-Out Placement For a Night:
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

Please list any other disposition decisions made that are not included in the above list:

9.2 Time Specificity for Appointment
1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number __________.

9.3 Time Specificity for Telephone Call, whether from client to counsellor or counsellor to client.
1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned
3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number __________.

10. Other Risk Factors
1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned
2. Previous suicide attempts: Mentioned / Not Mentioned
3. Previous suicidal ideation: Mentioned / Not Mentioned
4. Psychiatric history within the family.

11. List any environmental stressors which may have triggered the suicidal behaviour (e.g., death, separation in family, trauma, abuse, argument, fight)

12. For those who have attempted prior to the acute assessment, please circle the following for method use:

1. Pills: 

2. Knife:

3. Hanging:

4. Other: (please state)

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:
Andrew presented as an unhappy and withdrawn young boy. He sat in his chair maintaining eye contact throughout the interview. He answered all questions appropriately and seemed to engage well with the therapist.

He was dressed appropriately for the weather and the circumstances.
5. PRESENTING PROBLEM - describe current situation

Include: Duration, Intensity, Frequency, Parent/s/Client's perception of problem

Andrew was referred by his family and the school for concerns about his previous attempt and the impact of a present stressful event (e.g. death of a friend in a car accident). Andrew's mother had found some poems and a note making reference to wanting suicide and they contained some notes re: specific plans about how Andrew would harm himself.

1. Suicidality - Andrew previously had attempted suicide by trying to jump off a bridge. His friends had restrained him at the time and he was assessed by a service. However, he did not want counseling at the time and the file was closed. Andrew is angry that his mother had found the notes/notes as he said they were private.

2. Grief - Andrew said that he still misses his best friend that died in a car accident about 4 months ago. This friendship has existed since Andrew was 5 years old. Up to present, Andrew said everyone is telling him to move on, but he is not ready to yet.

3. Family Relationships - Andrew does not seem to have close relationships within his family. He stated that he fights with his dad and brother, but not so much so with his mother. The conflict seems to coincide with the time that his best friend died in a car accident.
6. RELEVANT BACKGROUND INFORMATION ***
CYPs involvement, exposure to trauma/abuse/violence, recent life changes.

No Cyprus involvement.

Exposure to grief when best friend died tragically in a car accident about 4 months ago.

7. SELF-HARM ASSESSMENT - include alcohol & drug use ***
Suicidal ideation - triggers, thoughts, inhibitors
Actions - description of attempt, method used, where, when, why. What did they hope the attempt would change?
History - describe other attempts and triggers. Hospital or other agency involvement?

Mother found suicide notes/poems in room. Notes had specific plans about harm (re: hanging). Previous attempt 3 months ago when Andrew tried to jump off a bridge. Andrew has had thoughts of dying since his best friend died in a car accident very recently. CAFS were involved in the past but Andrew dropped out of the service.

Andrew does not seem to have any hope for the future.
8. MENTAL HEALTH HISTORY ***
Diagnoses, past treatment, response to treatment, previous CAFs, or other Mental Health services.

[Handwritten note: \"Stopped out of CAFs service in the past.\"]

9. CURRENT MEDICINES ***
Psychotropic and other medication, dose, compliance, response and efficacy.

N/A

10. MEDICAL HISTORY
Previous illnesses, past medications, allergies to medications, head injury, hospitalisations.

Nothing major to note here.

11. ALCOHOL AND/OR DRUG - current use and history ***
Substances, amounts and frequency.

Drinks excessively but only at parties. Occasionally he will smoke marijuana.

12. CULTURAL ASSESSMENT AND NEEDS ***
Include spirituality and religion.

N/A
13. RELEVANT INFORMATION FROM OTHER SOURCES - always identify source ***
e.g. School, Specialist Education Services, Guidance and Learning Unit.

Andrew's school performance has dropped considerably (used to be average but now below average) over the last year. He is also 'weaving' school.

14. LEGAL HISTORY

Custody Issues. Forensic, Police, Youth Justice contact.

N/A.

15. FAMILY/WHANAU

Client's place in family/whanau structure. client's perception of family relationships. genogram, check for family/whanau history of psychiatric illness, drugs, alcohol/violence, separations, physical, sexual or emotional abuse

[Diagram of family tree]

Andrew sees his mother regularly. His mother found the suicide notes when he was staying with her. Andrew described himself as always in conflict with his father and brother. This has been more noticeable since the death of his best friend.

Patrick suffers from clinical depression and is on antidepressant medication at the moment. He is seeing a counsellor at Fenwyk House. There is no other known psychiatric history in the family.
### DEVELOPMENTAL HISTORY

#### 16. CONCEPTION / PREGNANCY / ADOPTION


#### 17. INFANCY, EARLY CHILDHOOD

Include milestones, language, significant losses, separations


#### 18. SCHOOL

Include academic performance, attendance changes, use of teacher aide, Specialist Education Service, Guidance and Learning Unit, peer and teacher relationships.


#### 19. INTERESTS, HOBBIES, SPORTS


---

*CAF5 Assessment*

25/03/98

PAGE 6

Continuation sheet used
Andrew seems to be suffering from depression which is related to bereavement of his best friend. Andrew misses his best friend and is of the mind that if he kills himself he can be with his best friend forever. Andrew has no sense of the future and feels pressured to get better by everyone around him.

Andrew could guarantee his safety and agreed to work on his grief issues.

### 21. PROVISIONAL DIAGNOSIS (only complete if accepting for treatment by the Mental Health Service) ***

<table>
<thead>
<tr>
<th>Number Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis I</td>
<td></td>
</tr>
<tr>
<td>Axis II</td>
<td></td>
</tr>
<tr>
<td>Axis III</td>
<td></td>
</tr>
<tr>
<td>Axis IV</td>
<td>Bereavement/Anef</td>
</tr>
<tr>
<td>Axis V</td>
<td>Current GAF or CGAS</td>
</tr>
</tbody>
</table>
OUTCOME OF ASSESSMENT: ACCEPT OR DECLINE

22. □ ACCEPT FOR TREATMENT BY CAFs

RECOMMENDED INTERVENTIONS:

1. Individual weekly appointments for Assertiveness Training
2. Provision of emergency numbers
3. Agreement to time-out for this weekend with his uncles in order to have a break.

23. □ DECLINE FOR TREATMENT BY CAFs ***

REASON:

24. ASSESSMENT SIGN OFF- co-signed by Supervisor if required ***

<table>
<thead>
<tr>
<th>Referred to</th>
<th>Phone/fax/letter</th>
<th>Date</th>
<th>By Whom</th>
<th>Designation</th>
</tr>
</thead>
</table>

Print Clinician Name

Debbie Smith

Print Supervisor Name

Social Work

Date: 25/03/98

CAFS Assessment

Continuation sheet used

PAGE 8
CODER'S SHEET

1. Group
   Circle one: Attempter / Ideator

2. Age
   15 Yrs.

3. Gender
   Circle one: Male / Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: __________

5. Comorbidity
   Circle one: Yes / No

6. Social Support
   6.1 Emotional – Submeasure of Relationship Quality
      (a) Negative Emotional Support
         Circle one: __________ / Not Mentioned
      (b) Positive Emotional Support
         Circle one: __________ / Not Mentioned
   6.2 Negative Support Severity
      Circle one: None / Low / Medium / High
   6.3 Support Source
      (a) Negative Emotional Support Source
         Circle one for friends: __________ / Not Mentioned
         Circle one for family: __________ / Not Mentioned
Circle one for community: Mentioned / Not Mentioned

(b) Positive Emotional Support Source

Circle one for friends: Mentioned / Not Mentioned
Circle one for family: Mentioned / Not Mentioned
Circle one for community: Mentioned / Not Mentioned

7. Quantity of Support

7.1 Number of Support Network Resources

Record actual number (if mentioned in report) = ______

Record a score based on the following categories:

Circle one for “Large” Group: Mentioned / Not Mentioned
Circle one for “Medium” Group: Mentioned / Not Mentioned
Circle one for “Small” Group: Mentioned / Not Mentioned
Circle one for “No” Group: Mentioned / Not Mentioned

8. Coding For Risk-Level

8.1 Risk-Level – Measure #1 CGAS

CGAS Score = 50

8.2 Risk-Level – Measure #2

Circle one: Low / Medium / High

9. Safety Recommendations

9.1 Decisions

1. Hospitalisation: Mentioned / Not Mentioned
2. CYPFS: Mentioned / Not Mentioned
3. Respite Care: Mentioned / Not Mentioned
4. Provision of Emergency Phone Numbers: Mentioned / Not Mentioned
5. Time-Out Placement For a Night: Mentioned / Not Mentioned
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

9.2 Time Specificity for Appointment
1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number ________

9.3 Time Specificity for Telephone Call, whether from client to counsellor or
counsellor to client.
1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned
3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number ________

10. Other Risk Factors
1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned
2. Previous suicide attempts: Mentioned / Not Mentioned
3. Previous suicidal ideation: Not Mentioned
4. Psychiatric history within the family: Mentioned / Not Mentioned
11. List any environmental stressors which may have triggered the suicidal behaviour: 
(e.g., death, separation in family, trauma, abuse, argument, fight)

Death of a friend


12. For those who have attempted prior to the acute assessment, please circle the following for method use:

1. Pills: Mentioned / Not Mentioned
2. Knife: Mentioned / Not Mentioned
3. Hanging: Mentioned / Not Mentioned
4. Other: (please state) Mentioned / Not Mentioned

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:

Mentioned / Not Mentioned
CODER'S SHEET

1. Group
   Circle one: Attempter

2. Age
   15 Yrs.

3. Gender
   Circle one: Male, Female

4. Diagnosis
   Circle one or more: Axis 1 / Axis 2 / Axis 3 / Axis 4
   Record diagnosis(es) made: 

5. Comorbidity
   Circle one: Yes / No

6. Social Support
   6.1 Emotional – Submeasure of Relationship Quality
   (a) Negative Emotional Support
      Circle one: 
      (b) Positive Emotional Support
      Circle one: 

6.2 Negative Support Severity
   Circle one: None / Low / Medium / High

6.3 Support Source
   (a) Negative Emotional Support Source
      Circle one for friends: 
      Circle one for family: 

Circle one for community:  

(b) Positive Emotional Support Source
Circle one for friends:  
Circle one for family:  
Circle one for community:  

7. Quantity of Support
7.1 Number of Support Network Resources
Record actual number (if mentioned in report) = N.A.
Record a score based on the following categories:
Circle one for “Large” Group:  
Circle one for “Medium” Group:  
Circle one for “Small” Group:  
Circle one for “No” Group:  

8. Coding For Risk-Level
8.1 Risk-Level – Measure #1 CGAS
CGAS Score = 55.
8.2 Risk-Level – Measure #2
Circle one: Low (Medium) (High)

9. Safety Recommendations
9.1 Decisions
1. Hospitalisation:  
2. CYPFS:  
3. Respite Care:  
4. Provision of Emergency Phone Numbers:  
5. Time-Out Placement For a Night:  
6. Time-Out Placement For a Few Days: Mentioned / Not Mentioned
7. Limiting of Method Availability: Mentioned / Not Mentioned
8. Medication: Mentioned / Not Mentioned
9. Referral for Specialist Services on MDT at CAFS: Mentioned / Not Mentioned
10. Referral to External Agency or Organisation: Mentioned / Not Mentioned
11. Next Planned Appointment: Mentioned / Not Mentioned
12. Next Planned Telephone Call: Mentioned / Not Mentioned

Please list any other disposition decisions made that are not included in the above list:

9.2 Time Specificity for Appointment

1. Appointment within 24 hours: Mentioned / Not Mentioned
2. Appointment by the end of the week: Mentioned / Not Mentioned
3. Appointment the following week: Mentioned / Not Mentioned

If they have mentioned the exact value of time, please also record this number

9.3 Time Specificity for Telephone Call, whether from client to counsellor or counsellor to client.

1. Telephone call within 24 hours: Mentioned / Not Mentioned
2. Telephone call by the end of the week: Mentioned / Not Mentioned
3. Telephone call by the following week: Mentioned / Not Mentioned

If they have also mentioned the exact value of time, please also record this number

10. Other Risk Factors

1. Alcohol and/or Drug Abuse: Mentioned / Not Mentioned
2. Previous suicide attempts: Mentioned / Not Mentioned
3. Previous suicidal ideation: Mentioned / Not Mentioned
4. Psychiatric history within the family:  

11. List any environmental stressors which may have triggered the suicidal behaviour: (e.g., death, separation in family, trauma, abuse, argument, fight) 

12. For those who have attempted prior to the acute assessment, please circle the following for method use:

1. Pills:  

2. Knife:  

3. Hanging:  

4. Other: (please state)  

13. For those who have presented with suicidal ideation, please circle the following for plan specificity:  

Mentioned / Not Mentioned
Appendix C

Questionnaire for the Vignette Study

Instructions: Please read each vignette carefully. Answer all questions following each vignette. If you do not understand the questions, please ask the researcher for clarification. The definitions which you will need in order to answer these questions follow at the end of the document. Following each vignette, you will be provided with the level of negative support severity and are only expected to make a decision about future risk of self-harm. Please respond to the safety section of the questions in terms of what you would actually do following the acute assessment and not what you think you would do following such an assessment.

1. Mark is a 14 year old NZ European who lives with his mum and dad. Conflict occurs with his mother and father consistently around curfew. Average student at school. Some friends, but no close relationships. Discussed possibly taking his life to some people at school. Parents found poems in a diary about death and dying. Mark had a disagreement with his mother about being allowed to stay overnight at a friend’s house (party). As a consequence, Mark wrote these poems. Diagnosis appears to be parent-child relational problem.

**anything in parentheses [] will not be shown to clinicians

- low levels of negative support
- [low risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
  
  Please write the risk-level in the space provided: __________
• How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful. Please record the number chosen from the scale for risk: ____________.

• Choose the types of safety actions you would make for this case study by ticking the appropriate boxes.

  ___ Hospitalisation
  ___ CYPFS
  ___ Respite Care
  ___ Time-Out (regardless of time period)
  ___ Medication
  ___ Limiting of Method Availability
  ___ Provision of Emergency Appointments
  ___ Appointment within 24 hours
  ___ Appointment by end of week
  ___ Appointment following week
  ___ Telephone call with 24 hours
  ___ Telephone call by end of week
  ___ Telephone call following week
  ___ Liaison with G.P.
  ___ Liaison with school
  Others: _______________________________________

• List the top three reasons for choices of safety action(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?
2. Kate is a 15 year old NZ European who lives with her mother and father with no other siblings present. Emotional abuse at home. Above-average student. Dad works, but he is never around. No friends at school. She had an argument at home with her mum which resulted in abusive name-calling. Kate got upset, went into her room and cut herself. No stitches were necessary. Some symptoms of depression. The main diagnosis seems to be a parent-child relational problem.

- medium levels of negative support
- [moderate risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
___ Respite Care
___ Time-Out (regardless of time period)
___ Medication
___ Limiting of Method Availability
Provision of Emergency Appointments

- Appointment within 24 hours
- Appointment by end of week
- Appointment following week
- Telephone call with 24 hours
- Telephone call by end of week
- Telephone call following week
- Liaison with G.P.
- Liaison with school

Others: ____________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that cognitive choice)?

3. Jane is a 14 year old NZ European. Jane lives in a dysfunctional family environment and experiences emotional and physical abuse from her father. Jane has no siblings and has no contact with her mother who separated 2 years ago. Jane attempted suicide by ingestion of pills (various types) and was in hospital for two days as a result of this attempt. Recently, she indicated that the trigger for the attempt was a break-up with her boyfriend. Jane has few friends, is a below-average student and wags school a fair amount. She has symptoms similar to that of depression.

- high levels of negative support
- [high risk candidate according to risk definition]
Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful.
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

- Hospitalisation
- CYPFS
- Respite Care
- Time-Out (regardless of time period)
- Medication
- Limiting of Method Availability
- Provision of Emergency Appointments
- Appointment within 24 hours
- Appointment by end of week
- Appointment following week
- Telephone call with 24 hours
- Telephone call by end of week
- Telephone call following week
- Liaison with G.P.
- Liaison with school

Others: _______________________________
• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?

4. Melanie is a 15 year old NZ European who lives with her mother and step-father and younger sister, Lynn. She has a good relationship with her mother and step-father (communicate well) and they are supportive of her. However, Melanie has repeated arguments with her sister over clothes, and in particular privacy, as Melanie reports Lynn often going into her room and reading her diary. Recently Melanie got distraught over Lynn taking her clothes on a number of occasions and not asking. Melanie wrote a letter saying that she wanted to die and hated living so long as her sister was around. Melanie’s mother found the note and contacted the Child and Family Clinic. Melanie is an average student at school. The main diagnosis appears to be sibling rivalry.

• low levels of negative support with presence of some positive support (talking to)

• [low risk for suicide]

Please answer the following questions:

• Rate the risk-level according to the definitions provided (low, medium, high).

• Name the top 3 reasons for choice of risk-level.

• How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?

• How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

- Hospitalisation
- CYPFS
- Respite Care
- Time-Out (regardless of time period)
- Medication
- Limiting of Method Availability
- Provision of Emergency Appointments
- Appointment within 24 hours
- Appointment by end of week
- Appointment following week
- Telephone call with 24 hours
- Telephone call by end of week
- Telephone call following week
- Liaison with G.P.
- Liaison with school

Others: ________________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that cognitive choice)?

5. Rob is a 14 year old NZ European who lives with his mother and step-father. Poor family relations and constant bickering/arguments at home which occasionally result in Rob getting smacked and pushed by his father. Rob has a solid group of
friends through his local youth group which he can usually rely on for talking through
his problems. Only recently have his grades been affected and are at about below-
average standards. He recently had a fight with his parents over getting into trouble
with the police for shoplifting. His dad grabbed him by the arms and shoved Rob in
his room slamming the door behind him. Rob was very distraught, and consequently
cut his wrist. While his mum was checking on him, she found him and took him to
A&E, but no stitches were required and they bandaged his arm, as well as making a
referral to the CAFS clinic. Main diagnosis appears to be Abuse of a Child and
possible symptoms of depression/anxiety.

- medium levels of negative support with presence of some positive support
  (talking to)
- [moderate risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the
cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7
  point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study
  by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
___ Respite Care
6. Cheryl is a 16 year old NZ European who lives with her mother, brother and sister. Good, healthy family environment. Cheryl lives with her mother, as her father moved away to Aussie a few months ago. Cheryl can normally talk to her mother about her problems. Cheryl is below-average in school and has had no luck making new friends. She also has poor relations with her brother and sister, as it seems they are constantly fighting. Cheryl recently took a rope and attempted to hang herself. She was found unconscious by her brother. She was rushed to A&E where she was revived and spent several days on the ward. Main reason(s) for attempt were parent’s
marriage break-up, conflict with siblings and recent disclosure of sexual abuse (intercourse) by her uncle over several years. Main diagnosis PTSD, symptoms of depression, and abuse of a child.

- high levels of negative support with presence of some positive support (talking to)
- [high risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
___ Respite Care
___ Time-Out (regardless of time period)
___ Medication
___ Limiting of Method Availability
___ Provision of Emergency Appointments
___ Appointment within 24 hours
__ Appointment by end of week
__ Appointment following week
__ Telephone call with 24 hours
__ Telephone call by end of week
__ Telephone call following week
__ Liaison with G.P.
__ Liaison with school

Others: __________________________________________________________________________

• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that
cognitive choice)?

7. Allan is a 13 year old male who lives with his mum and dad and younger brother.
He is an average student at college. He has a couple friends at school, but these
same friends recently betrayed his trust and sided with some bullies at school;
consequently leading him to get bullied further and pushed around. Allan ran
home upset, but no one was there. He wrote a note and stated that he wanted to die
and could not find any reasons to live. His mum found the note later that day.
Concerns from his family were that he was depressed and rapidly becoming more
withdrawn.

• medium levels of negative support

• [low risk of suicide]
Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

- [ ] Hospitalisation
- [ ] CYPFS
- [ ] Respite Care
- [ ] Time-Out (regardless of time period)
- [ ] Medication
- [ ] Limiting of Method Availability
- [ ] Provision of Emergency Appointments
- [ ] Appointment within 24 hours
- [ ] Appointment by end of week
- [ ] Appointment following week
- [ ] Telephone call with 24 hours
- [ ] Telephone call by end of week
- [ ] Telephone call following week
- [ ] Liaison with G.P.
- [ ] Liaison with school

Others: __________________________________________________________
• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?

8. Karen is a 15 year old female living with her step-mother, father, brother (10 years) and sister (6 years). She has experienced long term physical and emotional abuse mainly from her step-mother and occasionally her father from the age of 6 onwards. She was also sexually abused by her grandfather for 3 years and has not disclosed this to anyone. Karen had been caught stealing and was brought home by the police. Step-mother had a major argument with Karen which resulted in Karen being thrown against the wall. Karen went to school the next day and told a teacher that she wanted to die. She had no specific plans. Possible diagnosis is abuse of a child and PTSD.

• high levels of negative support

• [low risk of suicide]

Please answer the following questions:

• Rate the risk-level according to the definitions provided (low, medium, high).

• Name the top 3 reasons for choice of risk-level.

• How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?

• How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
• Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

- Hospitalisation
- CYPFS
- Respite Care
- Time-Out (regardless of time period)
- Medication
- Limiting of Method Availability
- Provision of Emergency Appointments
- Appointment within 24 hours
- Appointment by end of week
- Appointment following week
- Telephone call with 24 hours
- Telephone call by end of week
- Telephone call following week
- Liaison with G.P.
- Liaison with school

Others: _______________________________________

• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?

9. Dawn is a 13 year old female living with her father. A disagreement occurred about her not getting pocket money as she had not done the chores. Dawn planned a detailed way of hanging herself, but got caught tying the noose. Her father
intervened and stopped her. Possible diagnoses include parent-child relational problem; some borderline personality features; and presence of depressive symptomatology.

- low levels of negative support
- [medium risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.
  
  ___ Hospitalisation
  ___ CYPFS
  ___ Respite Care
  ___ Time-Out (regardless of time period)
  ___ Medication
  ___ Limiting of Method Availability
  ___ Provision of Emergency Appointments
  ___ Appointment within 24 hours
  ___ Appointment by end of week
Appointment following week
 Telephone call with 24 hours
 Telephone call by end of week
 Telephone call following week
 Liaison with G.P.
 Liaison with school
 Others: ________________________________

• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?

Donna is a 14 year old NZ European who lives with her dad and grandparents. She cut her wrist and leg superficially as she felt she had to punish herself and feel some “pain”. Donna has been exposed to physical abuse from her mother for quite some time and sexual abuse from an uncle on her mother’s side of the family. Upon seeing the superficial scratches on her arm, her father contacted the CAFS service for an urgent appointment. She is a below average student and has no friends. She suffers from PTSD with some underlying depression.

• high levels of negative support
• [moderate risk]

Please answer the following questions:

• Rate the risk-level according to the definitions provided (low, medium, high).

• Name the top 3 reasons for choice of risk-level.
• How did you get to reach that decision (list the steps you took when making the
cognitive choice of low, medium or high)?

• How helpful did you find it having the definitions provided for risk? Rating on a 7
point scale, with 1 being least helpful and 7 being very helpful

• Choose the types of safety recommendations you would make for this case study
by ticking the appropriate boxes.

   ___ Hospitalisation
   ___ CYPFS
   ___ Respite Care
   ___ Time-Out (regardless of time period)
   ___ Medication
   ___ Limiting of Method Availability
   ___ Provision of Emergency Appointments
   ___ Appointment within 24 hours
   ___ Appointment by end of week
   ___ Appointment following week
   ___ Telephone call with 24 hours
   ___ Telephone call by end of week
   ___ Telephone call following week
   ___ Liaison with G.P.
   ___ Liaison with school

   Others: ____________________________________________________________

• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that
cognitive choice)?
11. Trevor is a 14 year old male living with his mother and younger brother. Trevor attempted to hang himself and was found unconscious, but still breathing. He was consequently rushed to A&E. He survived but the doctors felt that there was possible brain damage. Apparently, prior to the lethal attempt, Trevor had had a disagreement with his mother about not being allowed out to a party, as she needed him to look after his younger brother. Trevor seemed to have a long-standing history of depressive and conduct disordered symptomatology.

- Low levels of negative support
- [high risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
___ Respite Care
___ Time-Out (regardless of time period)
Medication

Limiting of Method Availability

Provision of Emergency Appointments

Appointment within 24 hours

Appointment by end of week

Appointment following week

Telephone call with 24 hours

Telephone call by end of week

Telephone call following week

Liaison with G.P.

Liaison with school

Others: ________________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that cognitive choice)?

12. Julie is a 17 year old female who severely slit her wrists with a razor blade. She was taken to A&E and the cuts required many stitches. Julie had had many ongoing experiences of verbal abuse from both her parents whom she is currently living with. She has no sense of the future and has lost the will to live, as she stated that she feels worthless. She is a below average student and has few friends. Julie appears to suffer from anxiety related symptoms.

- medium levels of negative support
- [high risk of suicide]
Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.
  
  __ Hospitalisation
  __ CYPFS
  __ Respite Care
  __ Time-Out (regardless of time period)
  __ Medication
  __ Limiting of Method Availability
  __ Provision of Emergency Appointments
  __ Appointment within 24 hours
  __ Appointment by end of week
  __ Appointment following week
  __ Telephone call with 24 hours
  __ Telephone call by end of week
  __ Telephone call following week
  __ Liaison with G.P.
  __ Liaison with school
13. Chris is a 15 year old male living with both parents (no siblings). He told some people at school that he was going to kill himself following a build up of several bullying incidents. Bullying included being pushed around, name calling and having things constantly stolen from him. Seemed to show signs of low mood over the last several months. He had no specific plans to self harm. He is an average student. Chris appears to show signs of anxiety/depression as a result of the above incidents.

- medium levels of negative support
- [low risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.
Hospitalisation
CYPFS
Respite Care
Time-Out (regardless of time period)
Medication
Limiting of Method Availability
Provision of Emergency Appointments
Appointment within 24 hours
Appointment by end of week
Appointment following week
Telephone call with 24 hours
Telephone call by end of week
Telephone call following week
Liasion with G.P.
Liasion with school
Others: __________________________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that cognitive choice)?

14. Nina is a 13 year old female living with her father and younger brother (12 years). No contact with her mother. Average student. Witnessed and experienced years of physical abuse from her mother toward all the members in the family. Has a close relationship with her father and two close friends whom she can rely on for support and understanding. Nina suffers from PTSD and had a flashback
which led to a panic attack. Nina consequently told her friends in confidence that she saw no future and felt hopeless to change anything. She said in passing to her friend, Amy, “If only I could just not be here anymore.” Upon questioning by the counsellor at school, Nina said that she did not really mean it and had no specific plans.

- high levels of negative support with positive support (talking to)
- [low risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.
  
  [ ] Hospitalisation
  [ ] CYPFS
  [ ] Respite Care
  [ ] Time-Out (regardless of time period)
  [ ] Medication
  [ ] Limiting of Method Availability
  [ ] Provision of Emergency Appointments
List the top three reasons for choices of safety recommendation(s).

How did you get to reach that decision (list the steps you took when making that cognitive choice)?

15. David is a 16 year old male living with his mother and 2 step-brothers (aged 7 and 12). David has a supportive family environment and generally can talk to his mother about difficult and personal issues. He has, however, very few friends at school, and occasionally has conflicts with his 2 younger brothers, particularly around privacy issues. David became very upset over an incident whereby he got blamed for fighting with his younger brother and accidentally breaking his arm. David's mother stated that she was angry at him and felt that he was irresponsible, as he was to be looking after both of them. David responded by taking a handful of paracetomol because he felt he had let everyone down. David's mother took him to A&E. David has a history of being reactive in this way as a means of diverting attention away from his mistakes. His mother said that he can be very
manipulative and reactive in this way. Some concerns about conduct and sibling rivalry.

- low levels of negative support with positive support (talking to)
- [medium risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
___ Respite Care
___ Time-Out (regardless of time period)
___ Medication
___ Limiting of Method Availability
___ Provision of Emergency Appointments
___ Appointment within 24 hours
___ Appointment by end of week
___ Appointment following week
Telephone call with 24 hours
Telephone call by end of week
Telephone call following week
Liasion with G.P.
Liasion with school
Others: ___________________________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that cognitive choice)?

16. Joanna is a 16 year old female girl who lives with her mother. She has no contact with her father. She does not get along with her mother and often their arguments turn into abusive situations. Joanna was also sexually abused by her father and blames her mother for not protecting her. Joanna has a very close relationship with her auntie and has 2 best friends she often talks to about her difficulties. Joanna suffers from PTSD and depression. She said that she was tired of the fighting and being reminded of the abuse so she superficially cut her wrists. Joanna said that she was tired of living and had no hope for the future.

- high level of negative support and positive support (talking to)
- [medium risk of suicide]

Please answer the following questions:
- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
• How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?

• How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful

• Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

  ___ Hospitalisation
  ___ CYPFS
  ___ Respite Care
  ___ Time-Out (regardless of time period)
  ___ Medication
  ___ Limiting of Method Availability
  ___ Provision of Emergency Appointments
  ___ Appointment within 24 hours
  ___ Appointment by end of week
  ___ Appointment following week
  ___ Telephone call with 24 hours
  ___ Telephone call by end of week
  ___ Telephone call following week
  ___ Liaison with G.P.
  ___ Liaison with school
  Others: ___________________________________

• List the top three reasons for choices of safety recommendation(s).

• How did you get to reach that decision (list the steps you took when making that cognitive choice)?
17. Carl is a 14 year old boy who lives with mother/father and sister of eight years. Carl has a solid group of friends through his local youth group whom he can rely on to sort out personal crises. He has a strained relationship with his parents, as he often does not listen nor do as they ask of him. Carl appears to show symptoms of conduct difficulties and can be very impulsive. Carl got upset with his parents, as they grounded him for a week due to his disrespectful attitude toward them and because he had broken curfew last nite. This consequence meant he would not go on a date he had arranged with his girlfriend. Carl consequently took 25 panadol with alcohol.

- low levels of negative support with positive support (talking to)
- [high risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

___ Hospitalisation
___ CYPFS
List the top three reasons for choices of safety recommendation(s).

How did you get to reach that decision (list the steps you took when making that cognitive choice)?

18. Jane is a 15 year old female living with her auntie and uncle (caregivers), as her parents recently had died in a car accident. Jane has been subjected to emotional abuse from her uncle. Jane has a very solid relationship with her auntie and often seeks advice and understanding from her. Jane has lots of acquaintances and a really good group of friends at college. She is a below average student and failing several subjects. She stated that everything was “closing in on her” and that she could not see a future. She attempted to take several types of pills from the
medicine cabinet and was rushed to A&E where she spent a few nights. She has symptoms similar to that of depression and PTSD.

- medium levels of negative support and positive support (talking to)
- [high risk of suicide]

Please answer the following questions:

- Rate the risk-level according to the definitions provided (low, medium, high).
- Name the top 3 reasons for choice of risk-level.
- How did you get to reach that decision (list the steps you took when making the cognitive choice of low, medium or high)?
- How helpful did you find it having the definitions provided for risk? Rating on a 7 point scale, with 1 being least helpful and 7 being very helpful
- Choose the types of safety recommendations you would make for this case study by ticking the appropriate boxes.

  __ Hospitalisation
  __ CYPFS
  __ Respite Care
  __ Time-Out (regardless of time period)
  __ Medication
  __ Limiting of Method Availability
  __ Provision of Emergency Appointments
  __ Appointment within 24 hours
  __ Appointment by end of week
  __ Appointment following week
__ Telephone call with 24 hours
__ Telephone call by end of week
__ Telephone call following week
__ Liaison with G.P.
__ Liaison with school

Others: ____________________________________________

- List the top three reasons for choices of safety recommendation(s).
- How did you get to reach that decision (list the steps you took when making that
cognitive choice)?

Please note that the definitions provided to the clinicians for the variables of social
support, risk-level and safety recommendations are those found in section 3.3.1, 3.3.2,
3.3.3, 3.3.5, 3.3.6 and 4.3.
Appendix D

Consent and Information Sheets for Vignette Study

Social Support, Risk-Level and Safety Recommendations in Youth Suicide

Deborah Smith
PO Box 50 047
Puketiro Centre
Porirua Hospital
Porirua
(04) 2375 222

SOCIAL SUPPORT AND SUICIDE STUDY

CLINICIAN CONSENT FORM

I have read the information sheet for this study and have had the opportunity to discuss details of the suicide research study with the primary investigator, Deborah Smith. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time.

I understand that my participation in this study is confidential and that no material which could identify me or my client will be used in any reports on this study.

I have had time to consider whether to take part in this study.

I understand that the procedure has been approved by the Human Ethics Committee of Massey University and the Ethics Committee of Capital Coast Health.

If you have any questions or concerns about the study, you may contact: The Wellington Ethics Committee, Wellington Hospital 3855999 ext. 5185. You may also wish to contact myself, Deborah Smith at work on (04) 2375 222, or my supervisors, Dr. Ruth Anderson at the School of Social Policy and Social Work, and Associate Professor Andrew Trlin at the School of Social Policy and Social Work, Massey University (06) 3569 099.

Signed: ____________________________

Name: _____________________________

Date: _____________________________

Researcher: ________________________
SOCIAL SUPPORT, RISK-LEVEL AND SAFETY RECOMMENDATIONS IN YOUTH SUICIDE

INFORMATION SHEET FOR CLINICIANS

Who am I?

My name is Debbie Smith and I am completing a Doctorate in Social Work. I am currently working as a social worker for the Puketiro Child, Adolescent and Family Service in Porirua. My PhD supervisors are Dr. Ruth Anderson and Associate Professor Andrew Trin both from the School of Social Policy and Social Work at Massey University.

What is the study about?

As you might be aware from recent newspaper articles, New Zealand has one of the highest rates of youth suicide in the world. This study aims to increase understanding some of the factors which help prevent young people from committing suicide.

I am interested in finding out what types of social support are assessed by clinicians and the types of decisions made to ensure safety for a person who may be at risk of harming themselves.

You are invited you to participate in this study. I will be collecting the data on the work site at Puketiro and Wellington. This study will require you to meet with the primary researcher for a one and a half-hour session. You will be invited to fill in responses to questions following your reading of 18 vignettes.

What are the risk and benefits?

This study will require a one and a half-hour sessional time with the primary researcher. No interviews are required. However, you will be provided with various clinical situations and asked to respond to several questions following these situations.

It is hoped that this study will aid in:
1. Furthering our understanding of youth suicide in New Zealand;
2. Adding to the New Zealand and international research base;
3. Possibly aiding in providing information which will benefit the delivery of mental health care; and
4. Helping to identify the factors which assessing clinicians think are important in determining suicide risk.

**What is involved if I decide to participate?**

You will meet with me for one and a half-hours.

**What about confidentiality?**

No material that could identify you will be used in any reports on this study.

Information from this study will be stored in a locked filing cabinet. The questionnaires will be coded with a three digit number and thus will in no way identify you as a person nor as a clinician. The information and consent form will be kept separate from the data collected. If the researcher needs to transport material between clinics, they will be transported in a combination lockable briefcase.

All questionnaires will be shredded upon completion of the study.

**What are my rights?**

- You have the right to decline to take part or to refuse to answer any particular questions
- You may withdraw from the study at any time
- You also have the right to ask any questions about the study at any time during participation
- You will be invited to provide information on the understanding that your name will not be used unless you give permission to the researcher
- You will also be given a summary of the results of the study when it is concluded

**When will I be told of the results?**

You will be sent a summary of the research outcomes upon completion of the study. You may contact the researcher or her supervisors throughout the duration of the study if you have any questions. Results will be used for the completion of a thesis and associated published papers.
Social Support and Suicide

Deborah Smith
Puketiro Centre
PO Box 50 047
Porirua Hospital
Porirua
(04) 2375 222

This study has received ethical approval from the Wellington and Massey University Ethics Committee.

If you have any queries or concerns about this study you may wish to contact a Health and Disability Services Consumer Advocate at (04) 495 6649.

Please contact me if you have any questions or comments. You can leave a message for me at the Puketiro Centre, PO Box 50047, Porirua, or ring me at work on (04) 2375 222. You may also wish to contact my supervisors, Dr. Ruth Anderson, School of Social Policy and Social Work, or Associate Professor Andrew Trlin, School of Social Policy and Social Work, Massey University, Private Bag 11 222 Palmerston North (06) 356 9099.

Kind Regards,

Deborah Smith
PhD Student
Appendix E

Coding Guide for Vignette Study

Social Support

1. Emotional – General Definition of Emotional Support

Defined as behaviour that communicates to an individual that he or she is cared for and loved. A few examples of emotional support include having a person(s) available to listen to one’s problems in an open and non-judgemental way, having someone to rely on for help, having someone who will be available to spend time with, and having someone who will make one feel valued. The implicit assumption within this definition is that the emotional support being assessed is of a positive quality. The recipient of that emotional support may perceive it as either negative or positive depending upon the timing, amount and mode of supportive behaviour that occurs. It is possible that the recipient may perceive the emotional support as being not available to him or her from the support network (e.g., family or friends) or it may be perceived as dysfunctional or unhelpful in which case the emotional support would be seen as negative, or perhaps even non-existent (see e.g., Pierce et al., 1996; Thompson, 1995; Vaux, 1988).

(a) Negative Emotional Support

Negative emotional support encompasses the existence of dysfunctional or unhelpful support. Examples of negative emotional support include references within the report to such items as:

- people who abuse the young person (physical, emotional, sexual); which also includes bullying
• people who the young person finds difficult to trust
• people who communicate with the young person in a dysfunctional way (e.g. fights, conflicts)
• people who will not listen to the young person's problems or difficulties
• people who cannot be relied on for help
• people who do not want to spend time with the young person

These items were constructed from the research on family conflict, social support and youth suicide (see e.g., Beautrais, Joyce & Mulder, 1996; Campbell, Milling Laughlin & Bush, 1993; Hollois, 1996; Kosky, Silburn & Zubrick, 1990; Sarason, Basham & Sarason, 1983; Vaux, 1987)

Other examples of negative emotional support would include references within the report to situations in which the young person cannot access any support, whether it be from friends, family or community groups. Negative support, as written in the report, can involve references to both past and present experiences of the patient insofar as they may possibly affect their current functioning (e.g., sexual abuse over a number of years which the patient is only now remembering and cites as a reason for them attempting or thinking about suicide). Score a 1 if there is any mention (according to the above definition) of negative support in the file and a 0 if there is no reference to negative support in the file.

2. Negative Support Severity Rating With/Without Positive Support

Examples of low levels of negative support severity would include such things as conflicts or fights or general “hassles” with friends or family and would result in little
or no impairment in the following areas: school, work, home and social relationships. Examples of medium levels of negative support severity would include serious conflicts, fights bullying and/or abuse (physical, sexual, emotional and verbal) from others such that it would result in some impairment in at least one of the following areas: school, work, home and social relationships. Examples of high levels of negative support severity would include such things as severe trauma, abuse or neglect such that it would result in serious impairment in more than one functioning area (e.g., school, work, social and family relationships). Each of these definitions takes into account both the type of conflict (e.g., fight, argument or abuse), as well as its impairment on the other person (see e.g., Chaffin, Wherry, Newlin, Crutchfield & Dukman, 1997; Straus, 1979).

Some vignettes include presence of positive emotional support along with levels of negative support severity. The item chosen for evidence of positive emotional support is having someone to talk with during difficult times.

Score a 1 for low negative support severity; 2 for medium negative support severity; 3 for high negative support severity; 4 for low negative support severity with presence of some positive support; 5 for medium negative support severity with presence of some positive support; and 6 for high negative support severity with presence of some positive support.

3. Risk-Level

Risk level will be considered as a continuous variable and will be defined in relation to three categories, such as referring to whether a person is at low, medium or high
risk. The criteria for these definitions have been compiled from several typologies which exist within the suicide research on risk-level (see e.g., Berman and Jobes, 1991; Patterson et al., 1983; Kral and Sakinofsky, 1994; Sommers-Flanagan and Sommers-Flanagan, 1995).

**Low Risk:** A person at low risk will be defined as someone who makes vague references to suicide, has no or a very poorly detailed plan, access to any methods of self-harm are unattainable or very limited, and choice of method to self-harm is not well-detailed or planned. For example, "jumping off a bridge", "hanging self", "taking pills" or "lying on train tracks" are considered to be poorly detailed in that the person has either not yet obtained the methods or not thought through the methods in a deliberate and detailed fashion. Generally, persons in this category do not know when they might follow through with their plan, and have not yet obtained the methods to self-harm. A score of 1 will be made for any patient with a low risk rating.

**Medium Risk:** A person at medium risk will be defined as someone who has considerable ideation and the beginnings of a plan to self-harm, access to any methods of self-harm are moderately attainable, and choice of method to self-harm is planned or detailed. If the person is an ideator, they have generally thought through their plan in a detailed manner and have actually obtained the methods to self-harm. If the person has already used a method of self-harm (attempted), then it would be seen as moderately lethal (e.g., superficial cutting, some pills taken). A score of 2 will be made for any patient with a risk rating of medium.
High Risk: A person at high risk will be defined as someone who has a well-detailed and thought out plan, their access to any methods of self-harm are very attainable, and their choice of method used was very lethal (e.g., hanging, overdose of pills, severe lacerations from cutting). A score of 3 will be given to any patient with a high risk rating.

4. Safety Interventions

If a clinician has marked the intervention with a checkmark, then that intervention will receive a score of 1 (action taken). Otherwise, if the intervention is not indicated by a mark, then it shall receive a score of 0 (no recommendation given)

- Hospitalisation – patient admitted to or granting continuance on an inpatient ward for further monitoring following acute assessment
- CYPFS – Referral to Children, Young Person’s and Their Families Service
- Respite Care – nursing care arranged by CAFS for the child and their family overnight.
- Time-Out Placement for a Night – informal arrangement made by the family for the young person to have a break from their family either for a night or a few days. Some time-out placements include staying with an extended family member or with a family friend.
- Time-Out Placement for Several Days – same as above except length of stay spans over a number of days rather than a night.
- Medication as prescribed by the psychiatrist at CAFS
- Limiting of Method Availability – instruction given by the clinician to the parents or caregivers about eliminating means of self-harm from the immediate
environment (e.g. hiding or locking away of pills, medicines, poisons, knives, or guns)

- Provision of Emergency Numbers (PERT – Psychiatric Emergency Response Team for after hours and CAFS number for during office hours 8:30-5:00)
- Next Planned Appointment for client to see therapist (24 hrs, end of week or following week).
- Next Planned Telephone Contact between client and therapist (24 hrs, end of week or following week).
- Other – Please record any other decisions made which were not included in the above list e.g., parent keeping a watchful eye, internal referral for further specialist consultation on the MDT (Multi-Disciplinary Team) at CAFS (e.g. psychiatric consultation, cognitive assessment and/or psychological testing) or referral to external agency or organisation (e.g. Youth Aid Officer, One-Stop Shops, Access to a Guidance Counsellor at school).
NATIONAL APPLICATION FORM FOR ETHICAL APPROVAL OF A RESEARCH PROJECT

PART I: BASIC INFORMATION

1. Type of proposal

- Health information [X]
- Health / disability research
- Other (please explain)

2. Has the approval of any other body been sought? [X] Yes

If yes, from whom? Massey University Human Ethics Committee (see over)

3. Full project title

The Impact of Social Support on Risk-Level Decisions and Safety-Oriented Recommendations Following Acute Assessment of Suicidal Youth

4. Short project title (lay title)

The Role of Social Support in the Assessment of Suicidal Adolescents

5. Lead Principal Investigator's name and position

Deborah Smith PhD Student, Massey University and Social Worker with CAFS, Porirua Hospital

6. Lead Principal Investigator’s iwi and hapu (if relevant)


7. Address of lead Principal Investigator

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Work ph</th>
<th>(04) 237 5222 or (04) 801 2960</th>
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<tr>
<td>62 Simla Cres.</td>
<td>Home ph</td>
<td>(04) 479 9381</td>
</tr>
<tr>
<td>Khandallah</td>
<td>Fax</td>
<td>(04) 237 9273</td>
</tr>
<tr>
<td>Wellington</td>
<td>E-mail</td>
<td><a href="mailto:debbiesm@xtra.co.nz">debbiesm@xtra.co.nz</a></td>
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8. Lead Investigator's qualifications

- PhD Student Massey University (1997 to present)
- Social Worker with Capital Coast Health, CAFS Unit, Porirua Hospital (1994 to present)
- Master of Social Work from University of Toronto (1994), Toronto, Ontario, Canada
- Bachelor of Arts, Honours in Psychology (1992) from Queen’s University, Kingston, Ontario, Canada

9. Co-investigators' name(s) and position(s)

A
B
C
D

10. Address of co-investigator A

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12. Address of co-investigator C

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13. Address of co-investigator D

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14. Where this is supervised work

14.1 Supervisor’s name
Dr. Ruth Anderson
Position
Academic Director, College of Humanities and Social Sciences, Massey
Day time phone number
(06) 356 9099

14.2 Signature of supervisor (where relevant)
Declaration: I take responsibility for all ethical aspects of the project

Massey University Human Ethics Committee

15. List any other Ethics Committees which have reviewed this project and attach their report(s)

16. I wish the protocol to be heard in a closed meeting
(If yes the reason should be given in a covering letter)

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17. I request a fast track procedure

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18. Proposed starting date (dd/mm/yy) 01-04-1999

19. Proposed finishing date (dd/mm/yy) 01-10-1999

20. Duration of project (mm/yy) Approx. 6 months

21. Proposed final report date (mm/yy) 01-11-1999
### PART II : PROJECT SUMMARY

1. Multicentre proposals

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<td>1.1.1 Is this a multicentre study? (if no, go to question 2)</td>
<td>X</td>
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<td>1.1.2 Is this application being lodged to the primary ethics committee?</td>
<td>X</td>
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<td>1.1.3 Has the protocol been reviewed by any other ethics committees in New Zealand? (If yes, attach copies of relevant correspondence)</td>
<td>X</td>
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<tr>
<td>1.1.4 What is the main organising centre for the study?</td>
<td>Massey University Private Bag 11 222 Palmerston North</td>
<td></td>
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<tr>
<td>1.1.5 List the other centres involved, and the Principal Investigator for each centre</td>
<td>Child, Adolescent and Family Service 21 Hania St Wellington</td>
<td>Child, Adolescent and Family Service PO Box 50 047 Porirua</td>
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<tr>
<td></td>
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<td>Principal Investigator: Debbie Smith</td>
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2. Scientific Assessment

Has this project been scientifically assessed by independent review?

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<td>If yes, by whom? (name and position) A copy of the report should also be attached</td>
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<td>If no, is it intended to have the project scientifically assessed, and by whom?</td>
<td>It is, however, a subject of supervision at Massey University.</td>
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3. Summary

Give a brief summary of the study (not more than 200 words, in lay language)

This study is intended to be the main study and builds on the findings from the pilot project. This main study is primarily interested in examining (1) the degree and extent to which the type (positive vs. negative support) and level of available social support impacts upon clinicians' decision to rate risk of suicide (e.g., low, medium, or high) for a given patient; (2) the extent to which the type (positive vs. negative support) and level of social support impacts upon safety recommendations; and (3) the cognitive processes which take place when clinicians make these types of decisions. Safety recommendations are those decisions made by the clinician in order to ensure continued safety and reduce the risk of future self-harm (e.g., provision of emergency numbers, educating about limiting method availability etc.).

Social support was chosen as a variable of interest as its presence or absence has been found to potentially influence the types of safety recommendations made by a clinician. The data will be collected by administering a collection of 18 vignettes describing various degrees of situations and having clinicians answering several questions related to social support, risk-level, safety recommendations and cognitive processes. The sample will consist of a total of 24 clinicians from the Puketiro and Wellington Child, Adolescent and Family clinics. The data will be collected using the coding established in the pilot project. This study will be beneficial to the area of youth suicide by furthering our understanding of the type of information clinicians collect with respect to social support and how this impacts their decisions for (1) a client’s risk level and (2) the safety recommendations made following an acute assessment. It will also be the first study to examine the cognitive processes involved when making these types of decisions. This objective is important it could assist in refining and building on present assessment/treatment models clinicians use when making risk/safety decisions for suicidal clients.
PART III : PROJECT DETAILS

SCIENTIFIC BASIS
1. Aims of Project
   1.1 What is the hypothesis/research question(s)? (state briefly)

   1. Given guidelines from the pilot project, it is expected that clinicians will have a reasonably high level of agreement regarding risk-level decisions (e.g., low, medium or high risk) for suicidal patients.
   2. It is expected that the type (positive vs. negative) and level of support will impact upon risk-level decisions and safety recommendations. For example, patients with positive support and low negative support would be expected to have lower risk levels and a greater number of safety recommendations, compared to patients with no positive support and high negative support who would be expected to have higher risk levels and a greater number of safety recommendations.
   3. For the qualitative portion of the study, only research questions will be put forth, as a priori hypotheses cannot be made at this stage. What steps do clinicians take when making risk and safety decisions? What kinds of information do clinicians utilise when making these types of decisions?

   1.2 What are the specific aims of the project?

   The project aims to more specifically examine two areas previously investigated in the pilot project: (1) social support, and (2) the impact of varying both type and level of social support on clinician decisions of risk and safety. Extending beyond the pilot project, this main study is interested in qualitatively examining the cognitive processes clinicians undertake when making risk-level decisions and safety recommendations. In addition, it is also interested in identifying the types of information clinicians find helpful when making these decisions.

2. Scientific Background of the Research
   Describe the scientific background of the project (300 words maximum)

   This study is primarily based on theoretical material obtained from several social support theorists, namely House and Kahn (1985), Pierce, Sarason, Sarason and Henderson (1996), Thompson (1995) and Vaux (1988). All the writers comment on a common theme: that social support is a complex meta-construct. That is, social support is a construct which encompasses the interaction between providers of support (e.g., friends, family etc.), supportive behaviour (e.g., the act of emotional support) and subjective appraisals of support (e.g., perception of support given/received).

   Application of social support and suicide research seems to indicate that lack of social support is a significant risk factor in suicidal adolescents. It has been found that suicidal adolescents tend to come from backgrounds characterised by some form of adversity (e.g., abuse), family conflict or dysfunction (Beautrais, Joyce & Mulder, 1998/1996; Brent, Perper, Moritz, Liotus, Schweers, Balach & Roth, 1998; Fergusson & Lynskey, 1995; Hollis, 1996; Kosky, Silburn & Zubrick, 1990). In addition, it has been found that suicidal adolescents tend to perceive their family relationships as less supportive (Campbell, Milling, Laughlin & Bush, 1993).

   Clinicians seem to utilise this information about social support when making safety recommendations for their suicidal clients. For example, two studies to date have found that the lower the level of social support, the more likely clinicians are to hospitalise suicidal adolescents (Dicker, Morrissey, Abikoff, Alvir, DeMarco & Koplewicz, 1997; Morrissey, Dicker, Abikoff, Alvir, DeMarco & Koplewicz, 1995).

   This present study will examine the interaction between social support, risk-level and safety recommendations as determined by the clinician. This model of analysis is based on (a) the findings from the pilot project and (b) the aforementioned theoretical and empirical material.

   In addition, this study will be qualitatively examining the process clinicians undertake when making decisions about support, risk and safety. There is also no research available in this area for a New Zealand population (adolescents in particular) which currently supports its significance for advancing knowledge in this country, as well as overseas.
### 3. Participants

<table>
<thead>
<tr>
<th>3.1 How many participants is it intended to recruit?</th>
<th>The sample will consist of approximately 24 clinicians from the Porirua and Wellington Child, Adolescent and Family Clinics (CAFS).</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 How will potential participants be identified?</td>
<td>Potential participants will be identified as a result of their membership to either CAFS in Wellington or CAFS in Porirua.</td>
</tr>
<tr>
<td>3.3 How will participants be recruited? (e.g. advertisements, notices)</td>
<td>A formal presentation will be given to both teams (Wellington and Porirua) in which clinicians will be invited to participate in the study.</td>
</tr>
<tr>
<td>3.3.1 Where will potential participants be approached? (e.g. outpatient clinic) If appropriate, describe by type (e.g. students)</td>
<td>Potential participants will be approached via a presentation of the study during a staff meeting. Both teams will receive the same presentation. Clinicians to be approached are part of a multi-disciplinary team (MDT) and include psychologists, social workers, psychiatrists and nurse counsellors.</td>
</tr>
<tr>
<td>3.3.2 Who will make the initial approach to potential participants?</td>
<td>The primary researcher will make the initial approach to potential participants.</td>
</tr>
<tr>
<td>3.3.3 Is there any special relationship between the participants and the researchers? e.g. doctor/patient, student/teacher</td>
<td>The primary researcher is a member of both teams, but holds no position of authority over and above the other team members.</td>
</tr>
</tbody>
</table>

| 3.4 Briefly describe the inclusion/ exclusion criteria and include the relevant page number(s) of the protocol or investigator's brochure | Not applicable. |

| 3.5 Explain how participants will be randomised? | Depending upon whether the clinicians consent to take part in the study, all available MDT team members will be utilised. As such, there will be no randomisation. |
4. Study Design

4.1 Describe the study design. Include how the research process is consistent with the Treaty of Waitangi in your answer to Q14.3.

The primary researcher will give a brief presentation of the main study to both the Wellington and Porirua teams. Potential participants will be invited to participate at this point and will be provided with information/consent forms, as well as a brown envelope. Potential participants will be invited to read the information sheet, sign the consent form (if they so wish) and seal it in an envelope provided. Potential participants will be asked to leave this information in the researcher’s work site mailbox.

Once the researcher has obtained all possible consent forms, she will begin the study by making appointments with the clinicians at their convenience. Appointment times will be for approximately one and a half hours. Participants will be informed that they can ask questions at any time. They will also be informed that they have the right to withdraw from the study at any time. Clinicians will be administered a questionnaire containing 18 vignettes or brief case studies. They will be invited to respond to the questions which follow each vignette. Please refer to the attached questionnaire for specific details.

The primary researcher will keep the consent forms separate from the questionnaires so as to ensure confidentiality. Each questionnaire will be coded with a three-digit number in order to ensure anonymity. There will be no identifying information on the questionnaires. Once the questionnaires are completed, the primary researcher will score the data. Any qualitative information will be analysed via thematic pattern analysis.

4.2 How many visits/admissions of participants will this project involve? Give also an estimate of total time involved for participants.

The total time per participant will be 90 minutes. For 24 staff, the entire project will utilise a total of 30 hours.

4.3 How is data to be stored, kept and disposed of?

Data will be stored in a locked filing cabinet on site at both the Wellington and Porirua Clinics. When the study is completed, all information will be shredded.

4.4 Describe any methods for obtaining information. Attach questionnaires and interview guidelines.

A questionnaire containing 18 vignettes will be administered to each clinician. These vignettes typify the types of situations which present to the CAFS clinic for acute assessments. Following each vignette, clinicians will be invited to respond to 7 questions relating to support, risk and safety. Relevant definitions (risk and support) can be found at the end of the questionnaire in order to assist the clinician when answering the questions. These definitions were used in the pilot project and found to be reliable. Please see attached for a copy of the questionnaire.

4.5 Who will carry out the research procedures?

The primary researcher will carry out all procedures.
4.6 Where will the research procedures take place?
The research procedures will take place at both the Wellington and Porirua Clinics in a standard interview room.

4.7 If blood, tissue or body fluid samples are to be obtained, state type, use, access to, frequency, number of samples, total volume, means of storage and labelling, length of proposed storage and method of disposal.
Not Applicable.

4.8 Will data or other information be stored for later use in the current study or in a future study? Yes X No
If yes, explain how

4.9 Will any samples go out of New Zealand? Yes X No
If so where, and for what purpose?

5. Research Methods and Procedures
5.1 Is the method of analysis quantitative or qualitative? X (If the method of analysis is qualitative, go to question 5.2)
If the method of analysis is wholly or partly quantitative research, complete the following:
5.1.1 Describe the statistical method that will be used
Using mainly chi-square analysis. For the more complex analysis of categorical data (interactions), a log-linear model will be used.

5.1.2 Has specialist statistical advice been obtained? Yes X No
If yes, from whom? Statistics Department, Massey University

(A brief statistical report should be included if appropriate)

5.1.3 Give a justification for the number of research participants proposed, using appropriate power calculations.
This study is principally qualitative. However, for the quantitative part (chi-square, log-linear analysis), a total sample of 24 should be sufficient to lend appropriate power to the tests.
5.2 If the research methods are (wholly or partly) qualitative, briefly describe the method and analysis. If interviews are used include the general areas around which they will be based.

AS MENTIONED IN SECTION 5.1.1, CHI-SQUARE AND LOG-LINEAR ANALYSIS WILL BE USED FOR THE QUANTITATIVE ANALYSIS. WITH RESPECT TO THE QUALITATIVE ANALYSIS (E.G., COGNITIVE PROCESSES), INFORMATION WILL BE ORGANISED ACCORDING TO THEMATIC PATTERN ANALYSIS. THE QUANTITATIVE ANALYSIS WILL BE CONDUCTED BY USING THE SPSS 8.0 PROGRAM.

6. Risks and benefits

6.1 What are the benefits to research participants of taking part?

THE INFORMATION FROM THIS RESEARCH PROJECT SHOULD BENEFIT BOTH CLINICIANS, AS WELL AS THEIR CLIENTS. UNDERSTANDING THE TYPES OF DECISIONS MADE DURING AND AFTER AN ACUTE ASSESSMENT OF A SUICIDAL ADOLESCENT, AND HOW CLINICIANS MAKE THESE DECISIONS MAY AID IN THE FUTURE ASSESSMENT AND MANAGEMENT BY (A) POTENTIALLY REDUCING FUTURE SUICIDE ATTEMPTS AND (B) POTENTIALLY INCREASING THE RATE OF RECOVERY. THERE IS NO RESEARCH AVAILABLE ON THIS TOPIC FOR A NEW ZEALAND POPULATION (ADOLESCENTS IN PARTICULAR) WHICH FURTHER SUPPORTS ITS SIGNIFICANCE FOR ADVANCING CLINICAL KNOWLEDGE NATIONALLY AND INTERNATIONALLY.

6.2 How do the research procedures differ from standard treatment procedures?

NOT APPLICABLE.

6.3 What are the physical or psychological risks, or side effects to participants or third parties? Describe what action will be taken to minimise any such risks or side effects.

THE VIGNETTES DO CONTAIN SENSITIVE MATERIAL. IF ANY OF THE PARTICIPANTS EXPERIENCE ANY EMOTIONAL DIFFICULTIES AS A RESULT OF READING THIS MATERIAL, THEY WILL BE ENCOURAGED TO EITHER DISCUSS IT WITH THEIR WORK SUPERVISORS OR WITH THE RESEARCHER'S SUPERVISORS.

6.4 What arrangements will be made for monitoring and detecting adverse outcomes?

THE PRIMARY RESEARCHER WILL SPEND A BRIEF TIME AFTER EACH SESSION DEBRIEFING WITH THE CLINICIAN. IF ANY CONCERNS ARE RAISED DURING THIS TIME, THE RESEARCHER WILL ENCOURAGE THE PARTICIPANT TO DISCUSS SUCH MATTERS WITH EITHER THEIR SUPERVISOR OR WITH HER SUPERVISORS AT MASSEY.

6.5 Will any potential toxins, mutagens or teratogens be used? [X] No

If yes, specify and outline the justification for their use

---
6.6 Will any radiation or radioactive substances be used?  
□ Yes  □ No

Note: If any form of radiation is being used please answer the following. If no, go to question 6.8

6.6.1 Under whose license is the radiation being used?

6.6.2 Has the National Radiation Laboratory (NRL) risk assessment been completed?  
□ Yes  □ No

If yes, please enclose a copy of the risk assessment, and the contact name and phone number. If no, please explain why

6.7 What facilities/procedures and personnel are there for dealing with emergencies?

6.8 Will any drugs be administered for the purposes of this study?  
□ Yes  □ No

If yes is SCOTT approval required?  
□ Yes  □ No
7. Expected outcomes or impacts of research

7.1 What is the potential significance of this project for improved health care for Maori and non-Maori, and for the advancement of knowledge?

THIS PROJECT HAS SIGNIFICANCE FOR IMPROVED HEALTH CARE FOR MAORI AND NON-MAORI, AS IT WILL AID IN OUR UNDERSTANDING OF HOW CLINICIANS ASSESS FOR RISK OF SELF-HARM, AND CONSEQUENTLY, THE TYPES OF RECOMMENDATIONS THEY MAKE IN ORDER TO ENSURE CONTINUED SAFETY OF THEIR CLIENT(S). THE DEFINITIONS ESTABLISHED IN THE PILOT PROJECT (AND USED IN THE MAIN STUDY) FOR SUPPORT, RISK AND SAFETY COULD ASSIST OTHER CLINICIANS IN THE FIELD WHEN MAKING THESE DIFFICULT DECISIONS. THIS INFORMATION COULD THEN BE USED IN REFINING ASSESSMENT/INTERVENTION PROCEDURES FOR SUICIDAL YOUTH. THE END RESULT MAY BE (A) TO POTENTIALLY REDUCE THE LEVEL OF SUICIDAL BEHAVIOUR AND (B) TO INCREASE THE RATE OF RECOVERY.

AS THIS STUDY HAS NOT BEEN COMPLETED BEFORE, IT IS BELIEVED THAT IT WILL HAVE SIGNIFICANCE IN ADVANCING KNOWLEDGE ON YOUTH SUICIDE NATIONALLY AND INTERNATIONALLY.

7.3 Is this project to be used to formulate policy? [X] Yes [ ] No

If yes, specify how

THIS PROJECT COULD POTENTIALLY BE USED TO FORMULATE POLICY IN A VARIETY OF WAYS:

(1) IT COULD HELP TO REFINE PRESENT ASSESSMENT AND TREATMENT PROCEDURES FOR SUICIDAL YOUNG PERSONS IN CLINICS SUCH AS THE CHILD, ADOLESCENT AND FAMILY SERVICE;
(2) IT COULD PROVIDE EMPIRICAL EVIDENCE FOR FORMULATING POLICY TO SUPPORT THE ADVANCEMENT OF RESEARCH IN THE AREA OF YOUTH SUICIDE, AND
(3) IT COULD PROVIDE EMPIRICAL EVIDENCE FOR FORMULATING POLICY TO SUPPORT THE CONTINUATION AND IMPORTANCE OF FUNDING MENTAL HEALTH SERVICES FOR YOUNG PEOPLE.

7.2 What steps will you take to disseminate the research results?

UPON COMPLETION OF THE STUDY, THE RESEARCHER WILL PROVIDE A BRIEF WRITTEN SUMMARY OF THE STUDY RESULTS TO ALL PARTICIPANTS. SHE WILL ALSO PRESENT THE RESULTS IN A SEMINAR TO BOTH CAFS TEAMS. HOWEVER, THE PRINCIPAL PURPOSE OF THE STUDY IS TO CONTRIBUTE TOWARDS COMPLETION OF A DOCTORAL DEGREE AT MASSEY UNIVERSITY WITH THE PRINCIPAL FINDINGS TO BE PUBLISHED IN APPROPRIATE PROFESSIONAL AND SCHOLARLY JOURNALS.
PART IV: BUDGET AND USE OF RESOURCES

8. Budget
8.1 How will the project be funded?
Massey PhD scholarship (received as of Oct. 1/1998)
Potentially Health Research Council Funding (will find out at the end of November)

8.2 Does the researcher, the host department or the host institution, have any financial interest in the outcome of this research? Please give details.
Not applicable

8.3 Will the researcher personally receive payment according to the number of participants recruited?
If so, please specify:
No.

9. Resource Implications
9.1 Does the study involve the use of healthcare resources? □ Yes □ No
If yes, please specify:

9.2 What effect will this use of resources have on waiting list times for patients i.e., for diagnostic tests or for standard treatments?
Not applicable.

10. Financial Costs and Payments to Participant Volunteers
10.1 Will there be any financial cost to the participant? Give examples including travel.
There will be no financial cost to the participant. The senior clinician (manager) for CAFS Wellington and Porirua is very supportive of this project and is in agreement for research sessions to take place during work time. The sessional times are relatively short (approx. 90 minutes) so it should not have a significant impact on resources.
10.2 Will the study drug/treatment continue to be available to the participant after the study ends?  
Yes ☐ No ☒ N/a ☐

If yes, will there be a cost, and how will this be met?

10.3 Will any payments be made to participants or will they gain materially in other ways from participating in this project?  
Yes ☐ No ☒

If yes, please supply details

11. Compensation for Harm Suffered by Participants

Is this a clinical trial under Accident Rehabilitation and Compensation Insurance Corporation Guidelines?  
Yes ☐ No ☒

If yes, please answer the following:

11.1 Is the trial being carried out principally for the benefit of a manufacturer or distributor of the drug or item in respect of which the trial is taking place?  
Yes ☐ No ☒

(a) If the answer to 11.1 is yes, please complete Statutory Declaration Form B and answer questions 11.2, 11.3 and 11.4.

(b) If the answer to 11.1 is no please complete Statutory Declaration Form A.

11.2 What type of injury/adverse consequence resulting from participation in the trial has the manufacturer or distributor undertaken to cover? (please tick the appropriate box/es)

a) any injury (mental or physical)  
Yes ☐ No ☒

b) only serious or disabling injuries  
Yes ☐ No ☒

c) only physical injuries  
Yes ☐ No ☒

d) only physical injuries resulting from the trial drug or item, but not from any other aspect of the trial  
Yes ☐ No ☒

e) physical and mental injury resulting from the trial drug or item, but not from any other aspect of the trial  
Yes ☐ No ☒

f) any other qualification (explain)  
Yes ☐ No ☒

11.3 What type of compensation has the manufacturer or distributor agreed to pay?

a) medical expenses  
Yes ☐ No ☒

b) pain and suffering  
Yes ☐ No ☒

c) loss of earnings  
Yes ☐ No ☒

d) loss of earning capacity  
Yes ☐ No ☒

e) loss of potential earnings  
Yes ☐ No ☒

f) any other financial loss or expenses  
Yes ☐ No ☒

g) funeral costs  
Yes ☐ No ☒

h) dependants’ allowances  
Yes ☐ No ☒

11.4 Exclusion clauses:

a) Has the manufacturer or distributor limited or excluded liability if the injury is attributable to the negligence of someone other than the manufacturer or distributor? (such as negligence by the investigator, research staff, the hospital or institution, or the participant).  
Yes ☐ No ☒

b) Has the manufacturer or distributor limited or excluded liability if the injury resulted from a deviation from the study protocol by someone other than the manufacturer or distributor?  
Yes ☐ No ☒

c) Is company liability limited in any other way?  
Yes ☐ No ☒

If yes, please specify
12. Information and Consent

Consent should be obtained in writing, unless there are good reasons to the contrary. If consent is not to be obtained in writing, the justification should be given and the circumstances under which consent is obtained should be recorded. Attach a copy of the information sheet and consent form.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1 By Whom, and how, will the project be explained to potential participants?</td>
<td>The primary researcher will explain the project to potential participants via a formal, oral presentation to both CAFS teams.</td>
</tr>
<tr>
<td>12.2 When and where will the explanation be given?</td>
<td>Each team will receive a brief formal presentation on the study during staff meeting times.</td>
</tr>
<tr>
<td>12.3 Will a competent interpreter be available, if required?</td>
<td>N/A</td>
</tr>
<tr>
<td>12.4 How much time will be allowed for the potential participant to decide about taking part?</td>
<td>They will be given a week to decide from the time of the presentation.</td>
</tr>
<tr>
<td>12.5 Will the participants be capable of giving consent themselves? - if not, to whom will the project be explained and who will give consent?</td>
<td>They will be capable of giving consent.</td>
</tr>
<tr>
<td>12.6 In what form (written, or oral) will consent be obtained? If oral consent only, state reasons.</td>
<td>Written consent only.</td>
</tr>
<tr>
<td>12.7 Are participants in clinical trials to be provided with a card confirming their participation, medication and contact phone number of the principal investigator?</td>
<td>N/A</td>
</tr>
</tbody>
</table>

13. Confidentiality and Use of Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 How will data including audio and video tapes, be handled and stored to safeguard confidentiality (both during and after completion of the research project)?</td>
<td>Information will be locked away in a filing cabinet in the researchers’ office. No identifiable information will be on the questionnaire.</td>
</tr>
<tr>
<td>13.2 What will be done with the raw data when the study is finished?</td>
<td>Raw data will be shredded upon completion of the study.</td>
</tr>
<tr>
<td>13.3 How long will the data from the study be kept and who will be responsible for its safe keeping?</td>
<td>The researcher will be responsible for safekeeping of the data and will keep it for 5 years following the study’s completion.</td>
</tr>
<tr>
<td>13.4 Who will have access to the raw data and/or clinical records during, or after, the study?</td>
<td>The primary researcher, her supervisors at Massey and the thesis examiners will have access to the raw data during, and after the study.</td>
</tr>
<tr>
<td>13.5 Describe any arrangements to make results available to participants, including whether they will be offered their audio tapes or videos.</td>
<td>The results of the study will be made available to all participants through (1) informal presentation and (2) a brief report.</td>
</tr>
<tr>
<td>13.6 If recordings are made, will participants be offered the opportunity to edit the transcripts of the recordings?</td>
<td>N/A</td>
</tr>
<tr>
<td>13.7 Is it intended to inform the participant’s GP of the results of the investigations, if the participant consents?</td>
<td>N/A</td>
</tr>
<tr>
<td>If no, outline the reasons</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>13.8 Will any restriction be placed on publication of results?</td>
<td>Yes No</td>
</tr>
<tr>
<td>If yes, please supply details</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
14. Treaty of Waitangi
14.1 Does the proposed research project impact on Maori people in any way? (If no, go to question 15) Yes ☐ No ☑
14.2 Have you read the HRC booklet, “Guidelines for Researchers on Health Research involving Maori”? Yes ☐
14.3 Explain how the intended research process is consistent with the provisions of the Treaty of Waitangi.

14.4 Identify the group(s) with whom consultation has taken place, and attach evidence of their support.

14.5 Describe the consultation process that has been undertaken prior to the project’s development.

14.6 Describe any ongoing involvement the group consulted has in the project.
14.7 Describe how information will be disseminated to participants and the group consulted at the end of the project

The findings from the study will be disseminated to the participants via an informal seminar prepared by the primary researcher. Participants will also receive a brief written summary sheet of the study’s results.

15. Cultural Issues

15.1 Are there any aspects of the research which might raise specific cultural issues?

Yes  X  No

If yes, please explain

15.1.1 What ethnic or cultural group(s) does your research involve?

Vignettes are based on the New Zealand European cultural group and typify the types of clients who attend the CAFS clinics for acute assessments. Clinicians from the CAFS teams generally identify themselves as New Zealand European with the exception of a few workers from overseas (including myself). There is a Maori CAFS team which is separate from the generic CAFS team. As stated previously, the researcher will be utilising the generic CAFS team for her sample. I do not foresee any difficulties in this area.

Describe what consultation has taken place with the group prior to the project’s development

N/A

15.1.2 Identify the group(s) with whom consultation has taken place and attach evidence of their support

N/A
15.1.3 Describe any ongoing involvement the group consulted has in the project
N/A

15.1.4 Describe how you intend to disseminate information to participants and the group consulted at the end of the project
N/A

16. Other Ethical Issues

16.1 Describe any other ethical issues arising from this project, other than those already dealt with in your answers?

The primary researcher acknowledges that she is a colleague of the potential participants. However, in no way does she hold a position of authority (e.g., supervisor or senior role) over and above the people that she works with. Any potential effects of the colleague status on obtaining consent are believed to be minimal for the following reasons: (1) potential participants will be approached initially via a generic presentation at which stage they will be provided with consent/information sheets. They will have a week to decide and return the consent to the researcher, and (2) that the primary researcher does not hold a position of authority above and beyond her colleagues. In addition, it is important to note that since the beginning of the pilot project, members of both teams have consistently supported the researcher and her project and have a vested interest in completion of this study.

Thank you for your assistance in helping us assess your project fully

Please now complete:
- the declarations (Part V)
- a drug administration form (if applicable)
- an Accident Rehabilitation and Compensation Insurance Corporation form A or B (if applicable)
PART V: DECLARATIONS

1. DECLARATION BY PRINCIPAL INVESTIGATOR

The information supplied in this application is, to the best of my knowledge and belief, accurate. I have considered the ethical issues involved in this research and believe that I have adequately addressed them in this application. I understand that if the protocol for this research changes in any way I must inform the Ethics Committee.

NAME OF PRINCIPAL INVESTIGATOR (PLEASE PRINT): Debbie Smith, Social Worker, PhD Student

SIGNATURE OF PRINCIPAL INVESTIGATOR:

DATE: 11/12/98

2. DECLARATION BY THE HEAD OF THE DEPARTMENT IN WHICH THE PRINCIPAL INVESTIGATOR IS LOCATED OR APPROPRIATE DEAN OR OTHER SENIOR MANAGER **

I have read the application and it is appropriate for this research to be conducted in this department. I give my consent for the application to be forwarded to the Ethics Committee.

NAME AND DESIGNATION (PLEASE PRINT): Steve Kane, Senior Clinician, CAFS

SIGNATURE:

DATE: 

DESIGNATION:

** (NOTE: WHERE THE HEAD OF DEPARTMENT IS ALSO ONE OF THE INVESTIGATORS, THE HEAD OF DEPARTMENT DECLARATION MUST BE SIGNED BY THE APPROPRIATE DEAN, OR OTHER SENIOR MANAGER.

IF THE APPLICATION IS FOR A STUDENT PROJECT, THE SUPERVISOR SHOULD SIGN HERE).

3. DECLARATION BY THE GENERAL MANAGER OF THE HEALTH SERVICE IN WHICH THE RESEARCH IS BEING UNDERTAKEN (IF APPLICABLE)

I have reviewed the proposal for cost, resources, and administrative aspects and issues regarding patient participation and staff involvement. The proposal has my approval subject to the consent of the Ethics Committee.

NAME OF GENERAL MANAGER (PLEASE PRINT):

SIGNATURE: 
MEMO TO: Ruth Anderson  
Academic Director

CC: Ms Debbie Smith  
School of Social Policy & Social Work

FROM: Professor Philip Dewe  
Head of Department

DATE: 24 September, 1998

SUBJECT: HEC 98/103  
"The Role of Social Support in the Assessment of Suicidal Adolescents.

Thank you for your memo of the 22 September and the revised Ethics documents.

While we would certainly require Debbie to make contact with participants in the way we suggest, we are in this case prepared to adopt the ruling by the Wellington Ethics Committee.

In the meantime, I will try to get some information on the Health Information Privacy Code so that we can familiarise ourselves with their provisions.

PJ Dewe
6th July 1998

Debbie Smith  
Department of Policy Studies and Social Work  
MASSEY UNIVERSITY

Dear Debbie

Re: Human Ethics Application HEC 98/103  
The Role of Social Support in the Assessment of Suicidal Adolescents

Thank you for your amended information sheet, list of counselling services and consent form. The amendments you have made now meet the requirements of the Human Ethics Committee and the ethics of your proposal are approved.

Thank you for mentioning in your letter that you will now be required to obtain the patient's file yourself. Can you please ensure that in obtaining the patient files and working with the administration manager you conform to the requirements of the privacy act.

Yours sincerely

[Signature]

Professor Philip Dewe  
Chairperson  
Human Ethics Committee

c.c. Dr Ruth Anderson  
Academic Director, College of Humanities and Social Sciences  
School of Policy Studies and Social Work
9 June 1998

Debbie SMITH
Department: Policy Studies and Social Work

Dear Debbie,

Re: Human Ethics Application: HEC98/103
The Role of Social Support in the Assessment of Suicidal Adolescents

Thank you for attending the Human Ethics Committee meeting held on Friday 29 May 1998 with your supervisor Dr Ruth Anderson. The Committee raised their concerns regarding possible conflict of interest and were reassured that you would not be in contact with any past or present clients during your research.

The Information Sheet should be written in an easier reading, user friendly format and must be clear in informing young persons exactly what the study is about.

A follow-up list of counselling services that are available should be provided for participants if required.

The Committee understands that every effort will be made to inform and gain consent permission of parents if participant is living in a home environment.

Page 16 - Declaration by the Head of Department or Service Manager needs to be completed.

Subject to the above amendments and inclusions being received, the ethics of the application will be approved.

Any departure from the approved protocol will require the researcher to return this project to the Human Ethics Committee for further consideration and approval.

Yours sincerely

Professor Philip Dewe
Chairperson
Human Ethics Committee

cc: Supervisor: Dr Ruth Anderson
12 August, 1998

Debbie Smith
Puketiro Centre
PORIRUA HOSPITAL

Dear Debbie

98/78 - The impact of Social Support on risk level and safety recommendations following acute assessment of suicidal youth

Your application for Ethics Committee approval for the above study was considered by the Wellington Ethics Committee at its meeting of 11 August 1998.

The Committee was of the view that the only real ethical concern arose from any potential risk or harm to participants that might arise through contacting them in order to obtain their consent to have access to their file. We discussed whether it would be preferable therefore to avoid this situation arising at all by removing this potential point of contact.

The Health Information Privacy Code Rule 10 (1)(e) states: A health agency that holds health information obtained in connection with one purpose must not use the information for any other purpose unless the health agency believes on reasonable grounds:

(e) that the information:

(i) is used in a form in which the individual concerned is not identified;
(ii) is used for statistical purposes and will not be published in a form that could reasonably be expected to identify the individual concerned; or
(iii) is used for research purposes (for which approval by an ethics committee, if required, has been given) and will not be published in a form that could reasonably be expected to identify the individual concerned.

The Committee is of the view that your protocol would fall within (iii). We note that the Puketiro Centre must agree and they must be satisfied that you will remove all identifying information immediately.

It is also noted that you are a social worker at the Puketiro Centre and as such, could be said to have a responsibility generally to the group of health and disability support service consumers within that service.

Audit is defined as examining practice and outcome of a particular time and place to see whether they conform with expectations, with a view to informing and approving management rather than adding to general knowledge. The Committee considered that
there were considerable elements of audit in your work although it did also recognise that there was a research component.

For the reasons stated above, the Committee is of the view that it would be preferable that you do not approach individuals for their consent to access their files. We are satisfied that the provision of Rule 10 (1)(e)(iii) permits the use of the health information in this way. You would then therefore not send out the information sheet and consent form as included in your protocol. Had you done so we would have asked you to amend the title of the Wellington Ethics Committee in the information sheet. It is not the Capital Coast Health Ethics Committee but rather the Wellington Ethics Committee.

Final approval for the above study is granted by the Wellington Ethics Committee.

It is a condition of Ethics Committee approval that you provide a brief progress report no later than August 1999 and at the completion of the study a copy of any report/publication for the Committee's records. Please notify the Committee if the study is abandoned or changed in any way.

Should you wish to discuss the informed consent issue in the Health Information Privacy Code then please contact me at the Ethics Committee Office.

Yours sincerely

[Signature]

Sharron Cole
CHAIRPERSON
12 March, 1999

Ms Deborah Smith
Unit 1, 62 Simla Crescent
Khandallah
WELLINGTON

Dear Deborah

99/18 - The role of social support in the assessment of suicidal adolescents

Your application for Ethics Committee approval for the above study was considered by the Wellington Ethics Committee at its meeting of 9 March 1999.

The Committee was satisfied that all of the major ethical issues have been satisfactorily addressed. The only query raised by the specialist mental health member of the Ethics Committee was that the large number of safety recommendations that the clinician is required to consider for each vignette could possibly dilute the power of the study. The other point was a very small one from Part 3, 4.2, where the entire project would utilise a total of 36 rather than 30 hours. This small mistake however has no bearing on the validity of the study.

This study is approved by the Wellington Ethics Committee. It is a condition of Ethics Committee approval that you provide a brief progress report no later than March 1999 and at the completion of the study a copy of any report/publication for the Committee's records. Please notify the Committee if the study is abandoned or changed in any way.

I wish you every success with your research.

Yours sincerely

Sharron Cole
CHAIRPERSON
9 March 1999

Ms Deborah SMITH
Unit 1 62 Simla Crescent
Khandallah
WELLINGTON

Dear Deborah

Re: Human Ethics Application – MUHEC 99/4
“The Impact of Social Support on Risk-Level and Safety-Oriented Recommendations following Acute Assessment of Suicidal Youth”

Thank you for your letter of 22 February 1999 with your amended application.

The amendments you have made now meet the requirements of the Massey University Human Ethics Committee and the ethics of your application are approved.

I note that the Committee asked that in the Information Sheets the participant's rights be set out in bullet point form. I wonder if you could do this before the Information Sheets are sent out so that the participants have a clear idea of what their rights are.

Yours Sincerely,

Professor Philip J Dewe
Chairperson
Turitea, Palmerston North Campus
Massey University Human Ethics Committee

cc Dr Ruth H Anderson, College of Humanities & Social Sciences - Turitea, Massey University
Appendix G
Supplementary Analyses Removing the Effect of “Abuse” in the Archival Study

A series of post hoc supplementary analyses were completed examining whether the variable of abuse in the archival study had any effect on the chi-square analyses, as well as the loglinear model analyses. The abuse variable incorporated any reference made to physical, sexual and/or emotional abuse. A positive rating (“yes, present”) was recorded for any reference in the patient records to abuse (irrespective of the type). It was only possible to remove the global variable of abuse, since the different types of abuse (sexual, physical and/or emotional) were not measured independently. These post hoc analyses were completed as it was highlighted that abuse may very well be a confounding variable in these analyses. When abuse was present, negative support, and consequently negative support severity, were also coded as being present. The individual item of abuse could not be extracted from the definition of negative support, since this concept was coded according to presence of at least one or more items as listed in section 3.3.1. However, it was possible to track those records in which abuse was present and remove their effect from the analyses. No additional cases were found in which a rating of negative support severity was coded on the basis of indicated abuse.

The steps of the analyses were as follows:

1. Identification of case records in which abuse was present.
2. Chi-square analysis of group (attempter and ideator) and negative support severity (recoded) removing the effect of abuse.
3. Chi-square analysis of group and risk-level (recoded).
4. Chi-square analysis of group and safety interventions (recoded).

5. Loglinear model analysis – inclusion of variables such as group, negative support severity (recoded), risk-level (recoded) and safety interventions (recoded). The analysis was conducted removing the effects of abuse.

Abuse was found to be present in 12 cases in the attempter group and 12 cases in the ideator group. After removing the effects of abuse, the chi-square analyses revealed that there was still a significant interaction between group and negative support severity (recoded) (see Table 1), group and risk-level (recoded) (see Table 2), but not between group and safety interventions (recoded) (see Table 3) – results similar to that found when the effect of abuse was present. Removing the effect of abuse did not appear to alter the earlier results.

Table 1.

Negative Support Severity (Recoded) and Chi-Square Analysis by Group Removing the Effect of Abuse.

<table>
<thead>
<tr>
<th>Negative Support Severity</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th></th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Low</td>
<td>46.70</td>
<td>14</td>
<td>78.10</td>
<td>25</td>
</tr>
<tr>
<td>Medium-High</td>
<td>53.30</td>
<td>16</td>
<td>21.90</td>
<td>7</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 30.  <sup>b</sup>n = 30.

\[ \chi^2(1, N = 62) = 6.57, p < 0.05 \]
Table 2.

Risk-Level (Recoded) and Chi-Square Analysis by Group Removing the Effect of Abuse.

<table>
<thead>
<tr>
<th>Risk-Level</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%  n</td>
<td>%  n</td>
</tr>
<tr>
<td>Low</td>
<td>2.60 1</td>
<td>84.20 32</td>
</tr>
<tr>
<td>Medium-High</td>
<td>97.40 37</td>
<td>15.80 6</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 38.  <sup>b</sup>n = 38.

χ²(1, N = 76) = 51.47, p < 0.0001

Table 3.

Total Safety Interventions (Recoded) and Chi-Square Analysis by Group Removing the Effect of Abuse.

<table>
<thead>
<tr>
<th>Total Safety Interventions (Recoded)</th>
<th>Attempter&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ideator&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%  n</td>
<td>%  n</td>
</tr>
<tr>
<td>1</td>
<td>23.70 9</td>
<td>23.70 9</td>
</tr>
<tr>
<td>2</td>
<td>26.30 10</td>
<td>21.10 8</td>
</tr>
<tr>
<td>3</td>
<td>18.40 7</td>
<td>26.30 10</td>
</tr>
<tr>
<td>4</td>
<td>18.40 7</td>
<td>21.10 3</td>
</tr>
<tr>
<td>5-9</td>
<td>13.20 5</td>
<td>7.90 3</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 38.  <sup>b</sup>n = 38.

χ²(4, N = 76) = 1.32, n.s. (not significant).
A loglinear model analysis was also conducted utilising the following variables: group, risk-level (recoded), negative support severity (recoded) and safety interventions (recoded). The effect of abuse was removed from this analysis. It was found that there were significant effects between group and risk-level (recoded), and group and negative support severity (recoded). The interaction between negative support severity (recoded) and safety interventions (recoded) was no longer found to be significant once the effect of abuse was removed. When the effect of abuse was present, this interaction was found to be significant (see section 5.8). Upon the removal of the effect of abuse, the likelihood ratio chi-square change was 57.18 for the effect between group and risk-level (recoded) ($p < 0.00001$). Again, upon removal of the effect of abuse, the likelihood ratio chi-square change was 6.70 for the effect between group and negative support severity (recoded) ($p < 0.001$). The likelihood ratio chi-square was 24.97 which indicates that there were no significant three or four-way effects ($p = 0.870$). The standardised residuals for this analysis indicated that the model fits all cells reasonably well. The following pages indicate the observed and expected frequencies for the final model in this particular loglinear model analysis (see Table 4 on the following page).  

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1 These analyses were conducted in consultation with Duncan Hedderley, Institute of Science and Information Technology, Massey University.
Table 4.

Observed and Expected Frequencies from the Loglinear Model Analysis Comparing Risk-Level (Recoded), Negative Support Severity (Recoded) and Group (Removing the Effect of Abuse) in the Archival Study.

<table>
<thead>
<tr>
<th>Safety Interventions</th>
<th>G1^a</th>
<th>G2^b</th>
<th>G1^a</th>
<th>G2^b</th>
<th>G1^a</th>
<th>G2^b</th>
<th>G1^a</th>
<th>G2^b</th>
<th>G1^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk-Level</td>
<td>0.00</td>
<td>5.00</td>
<td>0.00</td>
<td>5.00</td>
<td>0.00</td>
<td>6.00</td>
<td>0.00</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Low Negative Support</td>
<td>0.00</td>
<td>4.20</td>
<td>0.00</td>
<td>4.20</td>
<td>0.00</td>
<td>4.20</td>
<td>0.00</td>
<td>4.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Medium Negative Support</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
<td>1.00</td>
<td>4.00</td>
<td>2.00</td>
<td>2.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Medium High Risk-Level</td>
<td>2.80</td>
<td>0.80</td>
<td>2.80</td>
<td>0.80</td>
<td>2.80</td>
<td>0.80</td>
<td>2.80</td>
<td>0.80</td>
<td>2.80</td>
</tr>
<tr>
<td>Low Risk-Level</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Low Negative Support</td>
<td>0.00</td>
<td>1.20</td>
<td>0.00</td>
<td>1.20</td>
<td>0.00</td>
<td>1.20</td>
<td>0.00</td>
<td>1.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Medium High Negative Support</td>
<td>Medium</td>
<td>2.00</td>
<td>1.00*</td>
<td>4.00</td>
<td>0.00</td>
<td>2.00</td>
<td>1.00*</td>
<td>3.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Medium High Risk-Level</td>
<td>3.20</td>
<td>0.20</td>
<td>3.20</td>
<td>0.20</td>
<td>3.20</td>
<td>0.20</td>
<td>3.20</td>
<td>0.20</td>
<td>3.20</td>
</tr>
</tbody>
</table>

G1^a = attempters  G2^b = ideators

Note. The residuals can be calculated by subtracting the observed cell counts from the expected cell counts. Please note that cells which have an asterix beside them reflect those instances in which the standardised residual was greater than 1.50. The observed frequencies are in regular font, whereas the expected frequencies are in bold. It is also important to note that the observed and expected frequencies lend more meaning to the loglinear model above and beyond the reported likelihood chi-square and chi-square change values. In addition, the loglinear output containing the observed and expected frequencies is generated on the best fit model. This additional statistical information was obtained through consultation with Duncan Hedderley, Institute of Information and Science Technology, Massey University.
Appendix H

Observed and Expected Frequencies for the Loglinear Model Comparing Negative Support Severity (Without or With Positive Support), Risk-Level and Total Safety Recommendations in the Vignette Study

The following is a list of the observed and expected frequencies for the loglinear model analyses conducted in the vignette study. The residuals can be calculated by subtracting the observed from the expected frequencies. This additional statistical information is intended to supplement the available statistical results presented in Chapter 6. The actual likelihood ratio chi-square and likelihood ratio chi-square change values (along with probability) for the interactions and best fit model are reported in Chapter 6. Please refer to the data summary table on the following page.
Table 1.

Observed and Expected Frequencies from the Loglinear Model Analysis Comparing Negative Support Severity (Without or With Positive Support), Risk-Level and Total Safety Recommendations (Recoded) in the Vignette Study.

<table>
<thead>
<tr>
<th>Risk-Level</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>20.00</td>
<td>5.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Negative Total Safety</td>
<td>19.80</td>
<td>3.20</td>
<td>9.00</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>3.20</td>
<td>2.80</td>
<td>28.90</td>
</tr>
<tr>
<td>Low</td>
<td>25.00</td>
<td>17.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Negative Total Safety</td>
<td>25.70</td>
<td>16.80</td>
<td>5.50</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>3.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>2.30</td>
<td>8.20</td>
<td>9.50</td>
</tr>
<tr>
<td>Medium</td>
<td>18.00</td>
<td>6.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Negative Total Safety</td>
<td>18.00</td>
<td>7.00</td>
<td>2.10</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>8.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>8.00</td>
<td>17.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Medium</td>
<td>1.00</td>
<td>9.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Total Safety</td>
<td>3.00</td>
<td>9.10</td>
<td>2.00</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>3.00</td>
<td>17.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>1.00</td>
<td>16.90</td>
<td>13.10</td>
</tr>
<tr>
<td>High</td>
<td>3.00</td>
<td>7.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Negative Total Safety</td>
<td>2.50</td>
<td>6.00</td>
<td>1.50</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>1.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>1.50</td>
<td>19.00</td>
<td>16.50</td>
</tr>
<tr>
<td>High</td>
<td>18.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Negative Total Safety</td>
<td>16.00</td>
<td>6.90</td>
<td>3.00</td>
</tr>
<tr>
<td>Support Severity</td>
<td>High</td>
<td>4.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Without Total Safety</td>
<td>6.00</td>
<td>14.10</td>
<td>22.00</td>
</tr>
</tbody>
</table>

Note. The expected frequencies are in bold and the observed frequencies are in regular font.