Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
The prevalence of interpersonal conflict in the workplace and its relationship to gender, functional position and style of conflict resolution

Scott Darren Clifford Doolan
2000
THE PREVALENCE OF INTERPERSONAL CONFLICT IN THE WORK PLACE AND ITS RELATIONSHIP TO GENDER, FUNCTIONAL POSITION AND STYLE OF CONFLICT RESOLUTION

A thesis presented in partial fulfillment of the requirements for a Degree of Masters of Arts in Psychology at Massey University.

SCOTT DOOLAN

2000
ABSTRACT

At present there is limited research on the prevalence of interpersonal conflict in the workplace. This study developed an escalation model on interpersonal conflict in the workplace and used it to research the prevalence of interpersonal conflict in the workplace and its interaction with conflict resolution styles. One hundred and twenty three employees from a public and a private organisation responded to a questionnaire, which included the Rahim Organisational Conflict Inventory. The results of this study identified that the prevalence of interpersonal conflict in the workplace is very high and that this prevalence decreased as the intensity of the conflict increased. Furthermore, the findings suggested that peoples' use of conflict resolution strategies vary as the intensity of the conflict increases. Lastly, the prevalence of conflict resolution styles in this study did not match previous research findings on cultural differences in dealing with interpersonal conflict. The implications of this study are that extensive research should be conducted on the escalation model of interpersonal conflict in the workplace. This would establish national norms so organisations could use these to determine whether their organisation has too little or too much interpersonal conflict.
# Table of Contents

Abstract

Table of Contents

List of Tables

List of Figures

1. Introduction

1.1 Definition of Conflict

1.2 Organisational Consequences of Workplace Conflict

1.3 Levels of Conflict

1.4 Prevalence of Interpersonal Conflict in the Workplace

1.5 Interpersonal Conflict Resolution Styles
  1.5.1 Aggression as a Conflict Resolution Style
  1.5.2 Moderating Factors Influencing Chosen Conflict Resolution Styles
    1.5.2.1 Functional Relationship
    1.5.2.2 Gender Issues
    1.5.2.3 Culture Issues
    1.5.2.4 Intensity of Conflict
    1.5.2.5 Work Experience

1.6 Summary of Literature

1.7 Aims and Research Questions

2. Method

2.1 Participants

2.2 Measures

2.3 Procedure
3. RESULTS

3.1 Analysis of the prevalence of interpersonal conflict in the workplace

3.2 Analysis of conflict resolution styles

4. DISCUSSION

4.1 Summary of findings

4.2 Discussion of findings

4.2.1 Prevalence of interpersonal conflict in the workplace

4.2.2 Interpersonal conflict escalation process

4.2.3 Prevalence of conflict resolution styles

4.2.4 Levels of interpersonal conflict and styles of conflict resolution

4.3 Limitations

4.4 Future research

4.5 Conclusions

5. REFERENCES

6. APPENDIX A: Work Conflict Questionnaire

APPENDIX B: Information Sheet

APPENDIX C: Letter to Organisations

APPENDIX D: Factor Structure Matrix for Varimax Rotated Factor Solution (Rahim, 1992)
List of Tables

Table 1: Prevalence of interpersonal conflict in the workplace (Appelberg et al, 1991) 6
Table 2: Thomas (1976) conflict handling modes 8
Table 3: Rahim's (1992) conflict resolutions styles 9
Table 4: Group norms of five styles of handling interpersonal conflict with supervisor, subordinates and peers (Rahim, 1992) 14
Table 5: Summary of sample demographic information 27
Table 6: Scales analysis of conflict resolution styles (Rahim, 1983) 32
Table 7: Percentage of interpersonal conflict experienced at each of the four levels of conflict 38
Table 8: Differences between each of the four levels of conflict 38
Table 9: Frequency of interpersonal conflict in the workplace 39
Table 10: Prevalence of interpersonal conflict for functional groups and gender effects 40
Table 11: Differences in the amount of conflict for each functional group with each level of conflict 41
Table 12: Prevalence of interpersonal conflict for males and females with their respective genders 42
Table 13: Mean scores for conflict resolution styles 45
Table 14: Reliability Analysis of aggression scale 54
Table 15: Prevalence of conflict resolution styles for Rahim (1992) study and for the present study 62
List of Figures

Figure 1: Total prevalence of interpersonal conflict in the workplace and for males and females 37

Figure 2: Prevalence of interpersonal conflict in the workplace for supervisors, peers and subordinates 41

Figure 3: Total mean scores for conflict resolution styles and for functional groups. 45

Figure 4: Mean scores by conflict level for obliging style of conflict resolution 47

Figure 5: Mean scores by conflict level for avoiding style of conflict resolution 48

Figure 6: Mean scores by conflict level for integrating style of conflict resolution 48

Figure 7: Mean scores by conflict level for compromising style of conflict resolution 49

Figure 8: Mean scores by conflict level for dominating style of conflict resolution 49

Figure 9: Mean scores by conflict level for aggressive style of conflict resolution 50

Figure 10: Prevalence of females' conflict resolution styles against levels of conflict 53

Figure 11: Prevalence of females' conflict resolution styles against levels of conflict 54
1. INTRODUCTION

The study of human conflict has received different emphasis from a number of schools of thought (philosophy, sociology, economics, political science, anthropology and psychology) throughout history, with the majority of contribution coming from the fields of philosophy and sociology. Myers (1993) states that conflict can be at times minimal or hidden, open, destructive or constructive, but that people and groups are so intertwined that conflict is a natural and inevitable human process.

A substantial proportion of our lives is spent working and with this comes considerable time spent interacting with others. Martin and Bergmann (1996) state that over the last few decades interpersonal conflict has become a normal event within a complex work environment. Wynne and Clarkin (1995) assert that there has been an alarming increase in violence at work that is causing serious concerns to both the individual and the organisation. Leather, Cox and Farnsworth (1990) state that violence within the workplace has increased in both the number of affected occupations and the magnitude of the violence.

Murders and attempted murders by former and disgruntled employees in the last decade has increased by 200%-300% in the United States (Stuart, 1992). A recent survey in the United States found that 15% of workers said that they had been attacked at least once in their lives on the job and 21% said that a co-worker had threatened them within the last year (Castelli, 1994, cited in Johnson & Indvik, 1996).

The American Management Association found thirty years ago that CEO's and senior managers spend nearly 25% of their time at work dealing with conflict between people (Rahim, 1992). Today the organisational setting is increasingly becoming more diverse with minorities, women and members from a variety of other cultures entering the work force. Deutsch (1991, cited in Borisoff, 1998) states that the likelihood of increasing conflict in the workplace is a certainty, because more diversity means a greater chance for misunderstandings and miscommunications between people. In light of this information the study of conflict in the workplace is a viable and salient issue to be researched.
1.1 DEFINITION OF CONFLICT

It is important to define what conflict is, as this will have a salient effect on how conflict is researched. A key problem in the study of conflict is to know which descriptions of behaviour come under the banner of conflict. Tidwell (1998) states that conflict is a term used to mean an assortment of things, in a variety of contexts. Words that are related to conflict are: fight, argue, contest, debate, combat and war (Tidwell, 1998). There are numerous definitions of conflict coming from a wide range of disciplines.

From an objectivist perspective conflict may be defined as a 'phenomenon that occurs when one or more parties perceive incompatible goals and then equally perceive interference from the other in their desire to obtain their goals' (Tidwell, 1998). Coser (1957, cited in Tidwell, 1998), a functionalist, defined conflict as 'the clash of values and interests, the tension between what is and what some groups feel ought to be'. Bercovitch (1984, cited in Tidwell, 1998), a situationalist, defined conflict as a 'situation which generates incompatible goals or values among different parties'. Folger (1993, cited in Tidwell, 1998), a communication interactionist, defined conflict as 'the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving those goals'.

Recent conflict researchers have defined conflict as:

- A disagreement or controversy in interest, values, goals or ideas (Bergmann & Volkema, 1994)
- A disagreement in values, beliefs and goals between the respondent and the conflict person (Martin & Bergmann, 1996)
- Behaviour by a person or group intended to inhibit the attainment of goals by another person or group (Riggio, 1996)

The definition of conflict used in this study will incorporate definitions used by Bergmann and Volkema (1994) and Martin and Bergmann (1996). These definitions represent a communication interactionist perspective on conflict and are discussed in the method section.
1.2 ORGANISATIONAL CONSEQUENCES OF WORKPLACE CONFLICT

Early theorists of conflict in the workplace (Mayo, 1933, cited in Rahim, 1992) assumed that conflict was detrimental to organisations and as a result tried removing it through organisation design. Today it is widely acknowledged that conflict in the workplace can be both functional and dysfunctional to organisations (Rahim, 1985, 1992; Bergmann & Vokema, 1989; Martin & Bergmann, 1996; Riggio, 1996; Borisoff, 1998; Tidwell, 1998). Rahim (1992) asserts that functional outcomes of conflict are:

- Organisational decision making may be improved.
- Alternative solutions to a problem may be found.
- Conflict may lead to synergistic solutions to common problems.
- Conflict may stimulate innovation, creativity and growth.

Edelmann (1993) states that positive work relationships can provide people with greater trust, increased self-esteem and enhanced creativity, productivity and job satisfaction. However, not all conflict produces functional outcomes. The increase in conflict in the workplace has generated several negative consequences (Romanov et al., 1996). The USA Safe Workplace Institute estimates that lost productivity and legal expenses resulting from organisational violence amounted to $US 4.2 billion dollars in 1995 (O'Leary-Kelly, Griffin & Glew, 1996). Worker conflict can also take the form of sabotage, vandalism and theft, including, for example, destruction of machinery and goods, interference with production, work slowdowns, passing on defective work, scratching cars and intentionally misplacing important paperwork (Neuman & Baron, 1997).

Edelmann (1993) and Riggio (1996) state that interpersonal conflict is highly stress related and is linked to several symptom outcomes including: psychological (e.g., inability to concentrate and think clearly and an increase in irritability), physical (e.g., headaches, insomnia, ulcers and high blood pressure) and behavioural (e.g., withdrawal from work and an increase in substance abuse). A recent study (Romanov et al, 1996) found that there was a significant relationship between interpersonal conflict at work and physician-diagnosed morbidity. Rahim (1992) asserts that dysfunctional outcomes of conflict are:
• Conflict may cause stress and job burnout.
• Communication between employees may be reduced.
• A climate of distrust and suspicion can develop.
• Resistance to change can increase.

From this research it is clear that organisations need to manage conflict in their organisations. Too little conflict may lead to stagnancy, mediocrity and groupthink, whereas too much conflict may lead to organisational breakdown (Rahim, 1992). This study will focus on examining the dysfunctional consequences of conflict. Conflict cannot be regarded as an 'all or none' phenomenon. This review commences with a discussion of the nature of dysfunctional conflict.

### 1.3 Levels of Conflict

Rahim and Bonoma (1979, cited in Weider-Hatfield & Hatfield, 1995) believed that definitions of conflict in the workplace have tended to be too general and simplistic. They depicted two primary originating points of organisational conflict (within a person versus between two or more persons) as the foundation for four levels of organisational conflict: intra-individual conflict, inter-personal conflict, intra-group conflict and inter-group conflict. These four types of conflict are listed below:

**Intra-personal Conflict:** Conflict that occurs when an individual is faced with two sets of incompatible goals (Riggio, 1996).

**Inter-personal Conflict:** Involves the interaction of two individuals who perceive incompatibility in goals, interests, values or ideas (Volkema, et al, 1996).

**Intra-group Conflict:** Conflict that arises when a person or faction within a group attempts to achieve a goal that interferes with the group's goal attainment (Riggio, 1996).
Inter-group Conflict: Conflict that occurs between two groups trying to attain their respective goals (Riggio, 1996).

Riggio (1996) states that the predominant source of conflict in the workplace stems from interpersonal conflict. This research project will specifically pertain to inter-personal conflict in the workplace. Riggio (1996) further states that the cause of interpersonal conflict in the workplace does not stem from the unavailability of resources or the structure of work, but the mere fact that certain individuals simply do not get along with each other. Earlier in the introduction, comment was passed on the growing incident of conflict and violence in the workplace. The salience of this issue as a research topic is a function of the incident of dysfunctional conflict. It is to a discussion of this issue that this review now turns.

1.4 PREVALENCE OF INTERPERSONAL CONFLICT IN THE WORKPLACE

Most research on interpersonal conflict in the workplace has looked at preferred styles of dealing with conflict and the variables that moderate the preferred style (Rahim, 1983, 1985; Ohbuchi & Takahashi, 1994; Cornille, Pestle & Vanwy, 1999; Munduate, Ganaza Peiro & Euwema, 1999; Sorenson, Morse & Savage, 1999). Few studies have looked at how often employees have experienced conflict and at what intensity the conflict reached at its peak. Volkema and Bergmann's (1989) research into interpersonal conflict in the workplace found that 84.4% of its participants had experienced conflict in the workplace at some stage in their lives. Their study used the definition of conflict as 'a disagreement or controversy in interest, values, goals or ideas' (Bergmann & Volkema, 1994). However this definition of conflict is very general and of the 84.4% of participants who reported conflict there would have been people who would have experienced different levels of intensity of conflict. This may have ranged from small disagreements to verbal threats, thus affecting their conflict resolution style. Appelberg et al's (1991) study of interpersonal conflict in the workplace in Finland asked participants whether they had experienced considerable difficulties with co-worker/superiors; (1) - during the last 6 months, (2) - during the last 5 years, (3) -earlier or (4) - never. Their study revealed that 14.2% of people surveyed had experienced considerable difficulties with either a co-worker or superior at some stage in their lives. Table 1 lists the findings of this study.
**Table 1: Prevalence of Interpersonal Conflict at Work (Appelberg et al., 1991)**

<table>
<thead>
<tr>
<th>SEX</th>
<th>Never %</th>
<th>Over 5 years ago %</th>
<th>During the preceding 5 years %</th>
<th>During 6 months %</th>
<th>Total Conflict %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85.8</td>
<td>2.43</td>
<td>5.35</td>
<td>6.41</td>
<td>14.2</td>
</tr>
<tr>
<td>Female</td>
<td>85.8</td>
<td>2.46</td>
<td>5.63</td>
<td>6.7</td>
<td>14.2</td>
</tr>
</tbody>
</table>

In another study by Appelberg *et al* (1996) on interpersonal conflict in the workplace found that 5.2% of men and 5.6% of women had experienced considerable difficulties with either a co-worker, superior or a subordinate in the last six months. Figures for other time periods were not available. O'Leary-Kelly, Griffin and Glew (1996) stated that in the USA postal service there were 550 episodes of employees' violence towards superiors and 200 episodes of violence by a superior toward an employee during an eighteen month period.

Ohbuchi and Takahashi (1994) studied conflict management strategies used by Japanese and American students. They found that on average they had experienced 3.05 and 1.95 episodes of conflict respectively over the past several weeks. This study gave the definition of conflict as 'overt and covert opposition or disagreement with others or interpersonal occurrences that involve perceived interference with your goal attainment'. Although not context specific to a work environment this study does give some indication of the prevalence of interpersonal conflict experienced by people in everyday life.

In looking at conflict in the workplace as a holistic issue, rather than just conflict between employees, it can be seen that it is significantly more prevalent. Leather, Cox and Farnsworth's (1990) survey of conflict in the workplace in the United Kingdom revealed that 1 in 200 people had suffered an injury that required medical assistance, 1 in 20 had been threatened with a weapon, and 1 in 6 had been verbally abused. The participants in the study were from an environment where they cared for the sick, injured and infirm. In Bexley, England, 66% of all council staff have suffered violent attacks over a three month period in a social services context (Robertson, 1993).
Although there is much research on conflict in the workplace, there is a limited amount of research of the prevalence between employees. Most research on workplace conflict is primarily associated with acts of physical violence (Neuman & Baron, 1997). Specifically there is no data pertaining to the prevalence of conflict in the workplace at various levels of intensity. Assumption of conflict homogeneity hinders understanding of these phenomena at two levels. Firstly, it makes it difficult to fully appreciate the nature of workplace dynamics. Secondly, in the absence of understanding levels of intensity in conflict, it becomes difficult to understand the role of conflict resolution style in reducing or sustaining conflict. In other words, different styles may be required to deal with different types or intensity of conflict.

1.5 INTERPERSONAL CONFLICT RESOLUTION STYLES

Employees engage in a series of behaviours in an attempt to resolve or reduce the amount of interpersonal conflict that they are experiencing. Conflict resolution implies the attempt of a person or parties to reduce or eliminate the conflict they are experiencing. The first person to categorise the way people deal with interpersonal conflict into conflict resolution style was Mary Follett (1926, cited in Rahim, 1992). She found that there were three ways in which people tended to deal with conflict: domination, compromise and integration. She later included avoidance and suppression into her theory of conflict resolution. Since then numerous studies on interpersonal conflict in the workplace that have looked at how people use various conflict resolution styles to cope with and resolve conflict. Blake and Mouton (1964, cited in Borisdroff, 1998) are credited with establishing a conceptual scheme for classifying styles of handling interpersonal conflict into five types: forcing, withdrawing, smoothing, compromising and problem solving. Blake and Mouton's (1964, cited in Sorenson et al, 1999) theory of conflict resolution had a two-dimensional model (concern for people and concern for production), which depicted which of the five styles was most likely to be used. When confronted with a conflict situation a person uses these two dimensions to frame a response.

compromising, competing (forcing), avoidance (withdrawal) and collaborating (problem solving) and redesigned the two dimensions to co-operative and assertiveness. Table 2 demonstrates this model of conflict resolution.

Table 2: Thomas (1976, cited in Borisdroff, 1998) conflict handling modes.

<table>
<thead>
<tr>
<th>Modes</th>
<th>Level of Assertiveness</th>
<th>Level of Co-operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competing</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Compromising</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Collaborating</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Avoiding</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Accommodating</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

Using a model of conflict similar to Blake and Mouton (1964) and Thomas (1976), Rahim (1983) described two dimensions, 'concern for self' and 'concern for others', as a basis for choosing five conflict resolution styles: avoiding, dominating, compromising, integrating and avoiding. The first dimension explains the degree to which a person attempts to satisfy his or her own concerns, while the second dimension explains the degree to which a person attempts to satisfy the concern of others. These two dimensions are characterised as portraying 'the motivational orientation of individuals during conflict' (Rahim & Magner, 1995, p. 122, cited in Sorenson, et al, 1999). Table 3 demonstrates this model of conflict.
Table 3: Rahim's (Rahim & Buntzman, 1988) conflict resolution styles.

<table>
<thead>
<tr>
<th>Conflict Style</th>
<th>Concern for satisfying self</th>
<th>Concern for satisfying other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominating</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Compromising</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Integrating</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Avoiding</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Obliging</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

This theory asserts that if a person has a high concern for themselves and a low concern for the other person in a conflict situation, then they are most likely to choose a dominating style of conflict resolution. Listed below are definitions of each conflict resolution style.

**Integrating:** High concern for self and for others. This involves openness, exchange of information and examination of differences to reach an effective solution acceptable to both parties.

**Obliging:** Low concern for self and high concern for others. This is associated with attempting to play down the differences and emphasising commonalities to satisfy the concern of the other party.

**Dominating:** High concern for self and low concern for others. This style has been identified with a win-lose orientation or with forcing behaviour to win one's position.

**Avoiding:** Low concern for self and for others. This has been associated with withdrawal, buckpassing or side-stepping situations.
Compromising: Intermediate concern for self and others. This involves sharing whereby both parties give up something to make a mutually acceptable decision.

Since Blake and Mouton's (1964, cited in Rahim, 1992) groundbreaking research on interpersonal conflict resolution styles there have been numerous two-dimensional models defining the concerns underlying conflict resolution decisions (Thomas, 1976, Rahmin, 1983; Pruitt & Rubin, 1986, cited in Mundaute, Ganaza, Peiro & Euwema 1999). With each of these models come four or five conflict resolution styles and are all plotted along two dimensions. Given the framework of these different models of conflict resolution, the key to understanding how an individual is going to respond to a conflict situation, is determining the type of cognition or thinking style associated with a conflict situation.

Van de Vliert (1997, cited in Munduate, et al, 1999) asserts that people do not actually use just one style of handling conflict but use an all embracing term called 'conglomerated conflict behaviour'. This theorist asserts that people combine different styles for dealing with conflict situations and that a person may change conflict styles as the situation of the conflict changes. Studies by Weider-Hatfield and Hatfield (1995) found support for the 'conglomerated conflict behaviour' theory where different styles of conflict resolution were found to correlate with each other. Specifically they found that integrating and compromising were positively correlated, while dominating and avoiding were negatively related. Mundaute, Ganaza, Jose and Euwema's (1999) research found positive and significant correlations between three pairs of styles: first, compromising and integrating, secondly, compromising and obliging, and thirdly, avoiding and obliging. Their study also found incompatibility between two pairs of styles: firstly, avoiding and integrating, and secondly, dominating and obliging.

Rahim (1992) has looked at which styles of conflict resolution are used most often used in the workplace and found that the integrating style was the most prevalent style followed by compromising, obliging, dominating and avoiding. Table 4 demonstrates the findings of this study. In a similar study, carried out on a Spanish sample, Pokrajac-
Bulian, Kardum and Susanj (1996) found that when dealing with a work colleague, the most prevalent style of conflict resolution was integrating followed by avoiding, obliging and dominating.

In a looking at the effectiveness of the various styles of conflict resolution, Rahim (1985) suggests that for conflict to be managed effectively one style may be more appropriate under the right circumstances. He asserts that an integrating style, and to a lesser extent a compromising style, are the most appropriate styles for dealing with strategic issues. Weider-Hatfield and Hatfield (1995) found that integrating was strongly related to organisational outcomes, whereas a dominating style was strongly related to fewer employee rewards and lower job satisfaction.

1.5.1 AGGRESSION AS A CONFLICT RESOLUTION STYLE

Neuman and Baron (1998) suggest that a broad range of situational, social and personal factors have lead to the increase of aggression in the workplace. It is suggested that contemporary business practices, strategies and structures, downsizing, contingent employment practices and increased workforce diversity have fuelled this increase. The resulting outcomes are: workplace aggression (Neuman & Baron, 1998), increased productivity and competitiveness, work and job pressure, stress, role conflict and work overload (Sperry, 1998). Elements of today business practices can create an organisational culture that can encourage inappropriate aggression, and furthermore creating a lack of reporting of aggressive behaviour (Sperry, 1998). O'Leary-Kelly, Griffin and Glew (1996) state that there have only been a few studies on aggressive behaviour at work and that it needs to be systematically researched.

The models of conflict resolution presented in this introduction (Blake & Mouton, 1964, cited in Thomas, 1992; Thomas, 1976; Rahim, 1983) do not include an aggression resolution style. Given the growing support for its occurrence within the conflict literature, aggression should be included in the discussion of conflict resolution.

Lay people often get confused over the differences between workplace aggression and assertiveness (O'Leary-Kelly, Griffin & Glew 1996; Neuman & Baron, 1997). There are
clear distinctions between the two. Assertive behaviour is defined as expressing feelings and opinions in a direct, honest and appropriate way without violating someone's rights (Makay, 1995). Workplace aggression is defined as 'efforts by individuals to harm others with whom they work, or have worked, or the organisation in which they are currently or previously employed. This harm is intentional and includes psychological as well as physical injury' (Neuman & Baron 1997, p.38)

Murphy (1995) states the workplace violence is a visible part of a much larger problem called workplace aggression. Murphy (1995) defined aggression as a person intentionally inflicting harm on another person or to cause some type of injury, whether it be physical, emotional or psychological. Murphy (1995) further defines workplace aggression into two types, covert and overt aggression. Covert aggression is where the actions of the aggressive person are performed in a way that conceals his/her identity from the target person (spreading rumours, insinuation with direct accusations, backstabbing etc.). Overt aggression is where the action of the aggressive person is not concealed from the target person e.g. verbal threats, fighting, destruction of property etc. Aggressive behaviour defined by Ross (1984) is where a person violates another person or person's rights when he/she uses inappropriate behaviour, which is either physical or verbal.

Volkema and Bergmann (1989) and Martin and Bergmann (1996) have looked at individual behavioural responses to interpersonal conflict but not groups of behaviour responses, such as the one's in Rahim's (1983) theory on conflict resolution. Their study asked participants to rank in order twenty-one conflict responses that they were actually using and might use. Of the twenty-one conflict responses six resembled an aggressive style of conflict resolution:

- Sabotage the persons work.
- Throw things.
- Push, strike or punch the person.
- Try to get even.
- Try to get the person to leave their job or the company.
- Shout at the person.
From Murphy's (1995) definitions of covet and overt aggression it can be seen that these behavioural responses clearly represent an aggressive type of conflict resolution. These behavioural responses were among the least used by the participants in the study of conflict resolution but does support the notion that aggression is used in the workplace to resolve conflict. An aggressive form of conflict resolution needs to be studied in the workplace, in conjunction with other styles of conflict resolutions presented in this study. This would aid the understanding of aggression in the workplace and would give new information on the key moderating variables to the use of an aggressive style of conflict resolution.

1.5.2 MODERATING FACTORS INFLUENCING CONFLICT RESOLUTION STYLES

There are potentially numerous variables influencing the choice of conflict resolution style. Volkema, Farquhar and Bergmann (1996) state that the moderating variables on preferred conflict resolution style can be broken down into two main areas, these being personal and environmental. Personal factors include personality, gender, position in the organisation and history of conflict. Environmental factors include resources, structure, politics, climate, and organisational culture and norms. Other factors influencing conflict resolution styles in the workplace may include family problems and substance abuse. This study does not intend to give a full literature review on every potential moderating variable on conflict resolution strategies, but will review the literature on the moderating variables that are relevant for this study and which will be researched here.

1.5.2.1 Functional Relationship

The choice of a conflict resolution strategy can be influenced by the characteristics of the target's power position in the organisation and the potential outcomes of the conflict (Putnam 1988). Perrealt and Miles (1978, cited in Drory & Ritov, 1997) assert that the conflict resolution strategies between dyads in organisations are clearly based on the dimensions of power, authority and degree of control. Musser (1982, cited in Drory & Ritov, 1997) has based a conceptual contingency model around the supervisor - subordinate dyad. This model suggests that a subordinate experiencing conflict with a
supervisor will choose a style of conflict resolution based around the fact that his/her own position in the organisation is partly dependent on his/her relationship with the supervisor. Thus, if a person wants to remain in an organisation and has career aspirations, then it would be best to use low risk strategies to resolve the conflict. Drory and Ritov (1997) assert that the main forces controlling the subordinates' strategies to resolve conflict with a superior are:

- The future dependence of the supervisor in the organisation, and
- Supervisor's control on monetary rewards.

Rahim (1992) states that the superior-subordinate relationship is complex. Subordinates often say what they think is acceptable, rather than what they know to be true. Therefore it is natural for subordinates to use an obliging style of conflict resolution, more so than with a peer or subordinate. His research found that 'dominating' was the most common conflict resolution style among people resolving conflict with subordinates. The compromising style was most common among people with equal power, and 'obliging' was most common when dealing with supervisors. Table 4 demonstrates Rahim's (1992) findings where a one way analysis of variance showed that there were statistically significant differences in all the five conflict styles for the referent role.

**Table 4: Group norms of five style of handling interpersonal conflict with superior, subordinates and peers (Rahim, 1992).**

<table>
<thead>
<tr>
<th>Referent Role</th>
<th>Conflict Resolution Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Integrating</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4.22</td>
</tr>
<tr>
<td><strong>Supervisor</strong></td>
<td>3.96</td>
</tr>
<tr>
<td><strong>Peer</strong></td>
<td>4.09</td>
</tr>
<tr>
<td><strong>Subordinate</strong></td>
<td>4.02</td>
</tr>
</tbody>
</table>
Research by Putnam and Poole (1987, cited in Drory & Ritov, 1997) also found conflict levels differ significantly across hierarchical levels with supervisors preferring forcing styles and subordinates' preferring avoidance, smoothing and compromise styles. Another study on functional relationships and conflict resolution styles found managers' preferences for conflict resolution strategies are less flexible than those of employees' (Lamude and Scudder, 1992). Rahim (1992) states that significant empirical research indicates that parties' hierarchical relationship plays a major role in moderating the style of handling interpersonal conflict.

1.5.2.2 Gender Issues

Gender differences in interpersonal conflict resolution has been widely researched for its potential to moderate the chosen style of conflict resolution. Substantial research has shown that the manner in which gender moderates conflict style choice remains unclear (Munduate, et al, 1999). A meta-analyses of 37 studies that focused on gender differences in conflict resolution styles, found that the impact gender had on the choice of a conflict style varied substantially (Gayle, Preiss and Allen, 1994, cited in Munduate, et al, 1999). Gayle, Preiss and Allen (1994, cited in Munduate, el te, 1999) went on to state that twenty years of research on the differences between men and women in the choice of conflict resolution strategies have not yielded consistent differences between the two sexes.

Portello and Long's (1994) study on managers' conflict resolution strategies found no differences between men and women. Another study concluded that neither psychological type nor gender significantly affected a person's chosen conflict resolution style (Sorenson, Hawkins & Sorenson, 1995, cited in Munduate, et al, 1999). Martin and Bergmann's (1996) study on conflict resolution styles found that gender was a moderating variable, but only when both genders were male. In this study males used a highly competitive style to resolve conflict with other males. They explained this observation using the social role theory; where males, when faced with conflict with other males, feel it is important to protect their male image. This study also found that the only conflict combination to reach phase 2 of Glasl's (1982) escalation process was male to male conflict.
It is widely thought that males are more aggressive than females in dealing with conflict. Research by Eagly and Wood (1991, cited in Murphy, 1996) found that the difference between genders in aggression is complex and moderated by many variables. They found that the difference in genders for aggression was moderated by the magnitude of provocation by the conflict person and in situations where social roles where required. Social roles in this context refers to gender roles, the different behaviours that society generally expects of men and women (Kalat, 1990). Recent research into the difference between males and females in aggression have concluded that males use more direct forms of aggression (hitting and verbal insults) to resolve conflict, whereas females use more indirect forms of aggression (spreading rumours & gossip about conflict person) to resolve conflict (Bjorkqvist, Osterman & Kaukiainen, 1992, cited in Murphy, 1996). In a large survey of employees at an academic institution, Bjorkqvist (1994, cited in Murphy, 1996) researched the types of aggression most likely used in a work context. It was found that males prefer using more rational forms of aggression e.g. interrupting a co-worker's work, being unfairly judgmental and critical of a co-workers work, whereas females prefer using more 'social manipulative' forms of aggression e.g. negative looks, backstabbing and insinuations lacking clear accusations. Murphy (1996) concludes that it seems that the role gender plays in moderating an aggressive form of conflict resolution in the workplace is non-significant, but that it is a complex phenomenon moderated by several variables.

Other research on aggression and the differences between men and women (not specific to workplace aggression) has stated that there is a consistent notion that the male culture is overtly more competitive and aggressive (Seth, 1994). Seth (1994) asserts that culturally, males are encouraged to respond to females in guilt-oriented, overly protective ways that provoke displacement of hostility for them onto themselves and other males. Seth (1994) further postulates that as young boys enter adulthood, they are encouraged to be competitive and combative with each other. The male stereotype encourages men to displace their natural feelings of worthlessness and inferiority by acquiring feelings of success and power through behaviour such as aggression, competition and over-achievement. Cultural issues are also becoming increasingly important as a consequence of increasing ethnic diversity in organisations.
1.5.2.3 Cultural Issues

Cultural differences can help to determine the style in which one chooses to resolve conflict (Elsayed-Ekhouly, Sayed, & Buda, 1996; Ohbuchi & Takahashi, 1994; Hubbard, 1999; Gabrielidis, Stephan, Ybrarra, Perarson, & Villareal, 1997). A concept developed by Hui (1988, cited in Myers, 1996) called 'individualism - collectivism' helps explain the differences between cultures in conflict resolution strategies. Individualist cultures give priority to one's own goals and concerns over those of others and groups, whereas collectivistic cultures give priority to one's group over one's own goals (Myers, 1996).

Numerous studies have found that people from individualistic cultures prefer to choose more competitive strategies to resolve conflict whereas collectivistic cultures have a tendency to use conflict resolution strategies with the least animosity (Ohbuchi & Takahashi, 1994; Elsayed-Ekhouly, Sayed, & Buda, 1996; Gabrielidis, Stephan, Ybrarra, Perarson, & Villareal, 1997; Hubbard, 1999). Rahim (1992) states that individualistic cultures tend to use dominating or obliging styles which reflect the ratio of concerns relating to one's self or of the other party. Collectivistic cultures are said to use integrating or avoiding styles which reflect the preference to have both parties satisfied. Gabrielidis, Stephan, Ybrarra, Perarson, and Villareal (1997) state that it is widely recognised that Asian cultures place pressure on individuals to avoid disagreement with others.

Elsayed-Ekhouly, Sayed and Buda's (1996) research into the differences between Arab Middle Eastern and American executives, found that American executives scored higher on styles of obliging, dominating and compromising, whereas Arab Middle Eastern executives scored higher on styles of integrating and avoiding. Hyun and Randall (1991) study found that Koreans (collectivistic) made extensive use of solution oriented strategies, whereas Americans (individualistic) made extensive use of either non-confrontational or control strategies to resolve conflict.

However different results have been found for individualistic societies. For example Canadians were found to prefer harmony-enhancing style of resolving conflict (Gire & Carment, 1992, cited in Gabrielidis, Stephan, Ybrarra, Perarson & Villareal 1997). In
contrast, Rahim's (1992) research (see Table 4) of American participants found that the integrating style was the most common style used, followed by compromising, obliging, dominating and avoiding. Integrating and compromising styles are where the person is concerned for themselves and the other person, which is not congruent with the Hui's theory (1988, cited in Myers, 1996). Furthermore, the obliging style (low concern for self and high concern for other) was more prevalent than the dominating style (high concern for self and low concern for other). What may be confounding Hui's theory (1988, cited in Myers, 1996) is that Rahim's (1992) research sample comprised all executives with work experience of between 17 and 22 years. The way experienced executives deal with conflict in the workplace can not be generalised to the general population or to the way people in general deal with conflict in a work context.

In a theory similar to Hui's (1988, cited in Myers, 1996) 'individualism - collectivism', Ting-Toomey (1988, cited in Hubbard, 1999) differentiated between high-context (collectivist) and low-context (individualistic) cultures in conflict resolution strategies in theory called 'conflict face-negotiation'. Specifically Ting-Toomey (1988, cited in Hubbard, 1999) states that high-context societies stress the individual's position in a group and that when faced with a conflict situation individuals are concerned with not only saving their own face but the face of others. Therefore high-context societies use conflict resolution styles that reflect a high concern for both conflict parties. Low-context societies are more likely to deal with conflict more directly, are concerned with saving their own face and believe their stance will stand or fall based on its own merits. Therefore low-context societies choose to deal with conflict situations more directly, a strategy which high-context societies find threatening. Research on this theory has proved inconclusive. Paula, Ting-Toomey and Sung-Ling (1991) found that Taiwanese people were more obliging and avoiding than their American counterparts, but that they were also more integrating and compromising.

Given the diversity of conflict resolution styles, and the fact that there use may be prescribed to some extent by demographic and environmental factors, it becomes important to examine the relationship between style and conflict intensity. If a particular style is inappropriate to manage certain intensities they will be rendered ineffective. Before examining this relationship in detail it is important to define the different intensities of conflict.
1.5.2.4 Intensity of Conflict

Of the numerous studies on interpersonal conflict in the workplace conducted by Rahim (1983, 1985, 1986, 1992), all have looked at the concept of conflict as a static situation. The questionnaire designed to measure conflict (Rahim Organisational Conflict Inventory - II) asks participants to rate how they would most likely deal with interpersonal conflict on five conflict resolution styles (Avoiding, compromising, integrating, dominating and obliging) with either supervisors, peers or subordinates. Therefore it is researching people preferences for dealing with conflict at three functional levels in a generalised manner.

Thomas (1992) and King and Miles (1990, cited in Martin & Bergmann) assert that the way people deal with interpersonal conflict is a dynamic process and that as the conflict develops over time individuals use a series of conflict styles to resolve the conflict. Thomas (1992) further says that as the situation surrounding the conflict varies it will significantly influence the individuals' chosen style of conflict resolution. Bergmann and Volkema (1996) state that research on conflict resolution behaviours shows that for any one-conflict situation there are a multitude of behaviours. Previous conflict with a person can also determine how an individual may choose to deal with conflict (Murphy, 1995).

Thus Rahim's Organisational Conflict Inventory - II does not look at how a person deals with a specific episode of conflict but generalises a person's preference for dealing with conflict. What it importantly does not take into account is how a person actually deals with a real conflict situation at a specific time in the conflict process, nor whether their style is appropriate for a given intensity of conflict. Bergmann and Volkema's (1996) study looked at how individuals dealt with a specific conflict incident. Their questionnaire began with a definition of conflict (a disagreement or controversy in interests, values, goals or ideas) and asked participants to rate in order 24 specific behavioural responses they would most likely use. Their study found that a person will initially use a preferred style of conflict resolution, use a secondary fall-back style when the first does not resolve the conflict and lastly use an extreme style of resolving the conflict when both first and second style fail. A limitation of this study is that the definition of interpersonal conflict is too vague. It neglects the fact that the intensity or magnitude of the conflict situation between participants will have varied, thus altering
their chosen style of conflict resolution. This study also does not categorise behavioural response into meaningful resolution styles.

Of the research that has looked at conflict in terms of intensity or magnitude and more than a single entity, Glasl (1982) has been most prevalent in this field. Glasl (1982) asserts that conflict moves through an escalation process, where it progresses from a less intense and complex situation to an increasingly intense and complex situation. Most theories on conflict and escalation deal with international conflict and how nations try to resolve the conflict they experience with other nations (Glasl, 1982). Thomas (1976, cited in Glasl, 1982) describes the escalation process as a 'spiralling' process, where one episode of conflict brings on feelings of resentment, negative attitudes and behaviour that in turn generate a new level of conflict. Senghaas (1971, cited in Glasl, 1982) states that the escalation process gathers its own momentum where the behaviour associated with the escalation becomes more dysfunctional, a phenomenon which he calls the 'pathological learning process'. Before a conflict situation (between a dyad relationship) reaches a high level of intensity, it is most probable that the situation has been through an escalation process first, where it has built up over a number of incidents and time. Glasl's (1982) model of escalation describes behaviours at work and differentiates nine stages of escalation, where each stage is characterised by different strategies to resolve conflict. The nine stages and three phases (Thomas, 1992) are listed as follows:

**Phase 1: Rationality and Control**

Parties are aware of tensions but try to handle them in a rational and controlled manner. Parties interact with some degree of co-operation and deal mostly with impersonal topics or issues.

Stage 1: Attempts to co-operate and incidental slips into tension and frictions
Stage 2: Polarisation and debating start
Stage 3: Deeds, not words
Phase 2: Severing the Relationship

The relationship between the parties becomes the main source of tension. Distrust, lack of respect and overt hostility evolve. The parties cannot imagine solving the conflict together and attempt to exclude each other.

Stage 4: Concerns for reputation and coalition
Stage 5: Loss of face
Stage 6: Dominance of strategies of threat

Phase 3: Aggression and Destruction

Confrontations become very destructive. The other party is viewed as having no human dignity, and any attempt to achieve positive outcomes is blocked. The parties risk their own welfare or even existence in order to damage or destroy the other.

Stage 7: Systematic destructive campaigns against the sanction potential of the other party
Stage 8: Attacks against the power nerves of the enemy
Stage 9: Total destruction and suicide

There are two limitations to Glasl's (1982) model of escalation in relevance to dealing with interpersonal conflict in the workplace. One, the model deals specifically with groups or parties experiencing conflict. The behavioural dynamics of experiencing conflict in a group, compared to an individual, will be different. Group processes like group-think and group-polarisation can substantially alter a group's behavioural tendencies to deal with conflict. Second, the model deals specifically with demonstrated behaviours in dealing with the conflict and neglects the important part of interpersonal conflict, the psychological feelings (frustration, anger etc.) associated with experiencing conflict.

To date there is no conflict escalation model that specifically pertains to dyadic relationships in the workplace.
1.5.2.5 Work Experience

Lewicki, Weiss and Lewin (1992) assert that an employee's work experience can play a part in the selection of conflict resolution strategies. They state that the selection of a conflict resolution style is clearly dependent on individuals' understanding of the working dynamics and environment of the organisation. The socialisation process a new employee goes through in an organisation plays a key part in the selection of a conflict strategy. Rudman (1996) defines socialisation as a process through which new employees learn the culture, norms and value system of the organisation. This includes behaviours required and expected from employees.

Ostroff and Kozlowski (1992) state that while cultural, norms and expected behaviour are learned quickly in the socialisation process, more subtle interpersonal communication skills and power awareness take longer to learn. Lewicki, Weiss and Lewin's (1992) research on work experience as a moderating variable on conflict resolution style found that both inexperienced and experienced employees used the same conflict resolution tactics for a low power opponent. However when dealing with a person with organisational power, experienced employees were significantly more sensitive in dealing with the conflict than inexperienced employees. Specifically, experienced employees upon realising that people with power in the organisation can control their future and goal attainment, are more likely to be obliging. However Martin and Bergmann (1996) assert that employees with long term career paths, rather than just experienced employees, are more likely to be sensitive to conflict issues when interacting with people with power. Their research found that part-time employees are more likely to use avoidance as a strategy to resolve conflict, whereas employees with career aspirations were more likely to use an integrating approach.
1.6 Summary of Literature

- There have been limited studies that have researched the prevalence of different intensities of interpersonal conflict in the workplace. Furthermore, the definitions of interpersonal conflict in workplace conflict research have been too general and simplistic. This has led to generalisations of the prevalence of interpersonal conflict which have ignored the different levels of intensity that conflict situation has.

- To date there no model on interpersonal conflict in the workplace that specifically looks at conflict as an escalation process.

- Research on interpersonal conflict resolution styles has largely failed to account for the large amount of variance in the intensity of the conflict situation. This has led to the intensity of the conflict situation confounding research's into how people tend to resolve conflict that they experience.

- Theories on conflict resolution have failed to categorise an aggressive form of conflict resolution into models of conflict resolution styles.
Aims

The present study aims to develop a conflict escalation model that is specifically relevant to interpersonal conflict in the workplace. This conflict escalation model will then be used to determine the prevalence of interpersonal conflict in the workplace and how it moderates conflict resolution strategies. This study aims to contribute to the understanding of interpersonal conflict in the workplace and to stimulate future research in the field of workplace conflict.

Research Questions

Due to the lack of research on escalation processes relating to interpersonal conflict in the workplace and their relationship to prevalence and conflict resolution styles, this study will be largely exploratory in nature. Therefore, this study will not present any hypotheses on the potential findings in regards to the prevalence of different intensities of interpersonal conflict in the workplace. From the research mentioned in the introduction it would seem likely that at low levels (intensity) of conflict the prevalence of conflict will be relatively high, but as the levels (intensity) of conflict increases the prevalence of conflict in the workplace would decrease. The following questions were researched:

1. What is the prevalence of interpersonal conflict in the workplace at various levels of intensity?
2. How frequent are episodes of interpersonal conflict in the workplace and at what levels of intensity?
3. At what functional relationship (superior to subordinate, between peers and subordinate to supervisor) is interpersonal conflict most prevalent and at what levels of intensity?
4. Which gender combinations (male to male, male to female, female to female and female to male) have the highest amount of conflict and at what levels of intensity?

5. How does the level (intensity) of interpersonal conflict experienced influence the style of conflict resolution used?

6. Is the relationship between levels (intensity) of interpersonal conflict and styles of conflict resolution moderated by gender?

7. Is the relationship between levels (intensity) of interpersonal conflict and styles of conflict resolution moderated by the functional relationship?

**Hypotheses**

Substantial research has shown that conflict resolution styles are moderated by functional relationships (Putman, 1988; Lamude & Scudder, 1992; Rahim, 1992; Drory & Ritov, 1997). On the basis of the problems identified in the review the following hypotheses are proposed:

**Hypothesis 1:** Obliging style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate.

**Hypothesis 2:** Avoiding style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate.

**Hypothesis 3:** Dominating style of conflict resolution will be chosen more often with a subordinate than with a peer or supervisor.

**Hypothesis 4:** Avoiding style of conflict resolution will be chosen less often with a subordinate than with a peer or supervisor.

Research has shown that culture can influence the style of conflict resolution chosen. Since New Zealand is an individualistic and low context culture, this study expects it findings to reflect the behavioural tendencies of such a culture. Given that an integrating style of conflict resolution was found to be the most prevalent in a number of studies (Rahijm, 1992; Pokrajac-Bulian, Kardum & Susanj, 1996), that an integrating style has
been found to an effective strategy in conflict resolution (Rahim, 1985; Weider-Hatfield & Hatfield, 1995) and that individualistic/low-context cultures (New Zealand) prefer dealing with conflict directly, it is predicted that an integrating style will be the most prevalent conflict resolution style.

Hypothesis 5: *Integrating style of conflict resolution will be the most used conflict resolution style.*

Although aggression is used as a conflict resolution style in the workplace, the prevalence of its use should be less than other styles. This is based on Bergmann and Volkema's (1996) theory of conflict resolution. Before an aggressive style is used to resolve conflict other styles would have been used to resolve the conflict before it got to an extreme stage where an aggressive style would be used. An aggressive style of conflict resolution can be considered a fallback style of conflict resolution.

Hypothesis 6: *Aggression style of conflict resolution will be the least used conflict resolution style.*
2. METHOD

2.1 Participants

The participants in this study were employees from two organisations, one each from the public sector and private sector. The public sector organisation is a Local Authority Service. Questionnaires were sent to 220 employees. The private sector organisation is an Insurance and Investment Company. Questionnaires were sent to 200 employees. The response rate was approximately 30% with 123 questionnaire being returned completed. This response rate was consistent with that found in similar studies. Bourque and Fielder (1995) state that a single mailing that incorporates no incentives can expect no more than a 20% response rate.

There were 123 participants with a gender ratio of 54 males and 65 females. Three participants did not state their gender. The average age of the participants was 38.45 (Males = 41.54 and Females = 35.87). The males ranged from 26 to 59 years of age while the females ranged from 17 to 54 years of age. A summary of the demographic figures is demonstrated in Table 5. The response rate was approximately 30% with 123 questionnaires being completed and returned.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td>1</td>
<td>.08</td>
</tr>
<tr>
<td>21-25</td>
<td>6</td>
<td>5.04</td>
</tr>
<tr>
<td>26-30</td>
<td>20</td>
<td>16.81</td>
</tr>
<tr>
<td>31-35</td>
<td>17</td>
<td>14.29</td>
</tr>
<tr>
<td>36-40</td>
<td>25</td>
<td>21.01</td>
</tr>
<tr>
<td>41-45</td>
<td>22</td>
<td>18.49</td>
</tr>
<tr>
<td>46-50</td>
<td>14</td>
<td>11.77</td>
</tr>
<tr>
<td>51-55</td>
<td>7</td>
<td>5.88</td>
</tr>
<tr>
<td>56-60</td>
<td>7</td>
<td>5.88</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>45.38</td>
</tr>
<tr>
<td>Female</td>
<td>65</td>
<td>54.62</td>
</tr>
</tbody>
</table>
2.2 Measures

The measures used in this study are included in the questionnaire. Appendix A displays the questionnaire used for this study.

Measure 1: Assessment of Interpersonal Conflict Escalation Process

In developing an interpersonal conflict escalation model the first step involved defining interpersonal conflict. From the definitions of interpersonal conflict in the introduction it is clear that there are three salient elements to the definitions.

- One, interpersonal conflict is between two or more people.
- Two, there must be a disagreement or some form of controversy between the people experiencing conflict.
- Lastly, there must be a reason why the parties are experiencing conflict. From the definitions mentioned in the introduction, the words most used to describe this element are a difference in 'ideas, goals, interest and values'.

Furthermore, a fourth salient element in the context of this study is that the word 'work' needs to be included in the definition to provide a work context. The definition of interpersonal conflict used for this study was a combination of Bergmann and Volkema's (1994) and Martin and Bergmann's (1996) definitions described earlier in the introduction. This definition incorporates the four salient elements just mentioned.

Interpersonal Conflict Definition:

'A disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work'

This definition of interpersonal conflict is broad enough to cover a wide range of reasons why a person is experiencing conflict. The next stage in the development of an interpersonal conflict escalation model was to develop different levels of intensity. It was decided that there would be four levels to the model with two dimensions to each level;
1) the magnitude or intensity of the inter-personal conflict and the psychological feelings associated with the conflict, and 2) what conflict resolution strategies may have been taken to resolve the conflict.

**Definition of interpersonal conflict in the workplace and the various levels of escalation:**

**Level 1:** A minor disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which results in some feelings of minor uneasiness and discomfort that may lead to avoiding the person or persons, talking to a friend or peer about the problem and/or talking to the conflict person or persons about the disagreement or controversy.

**Level 2:** A moderate disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which results in feelings of dislike towards the person or persons, feelings of moderate uneasiness and discomfort that may lead to wanting to avoid the person or persons, a moderate argument or taking the problem to a higher source.

**Level 3:** A serious disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which results in strong feelings of dislike and anger to the person or persons. This may lead to either strong verbal arguments, threats, feelings of wanting to leave the job, serious avoidance of the person or person's, crying or asking for a transfer.

**Level 4:** A very serious disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work, which results in feelings of intense anger, frustration and hatred that either leads to outbursts of verbal and/or physical abuse and/or sabotaging the person or person's work and/or leaving your job.
In critiquing the model, one argument against its validity is that the definition of the conflict levels include strategies for dealing with conflict, so the two major constructs (level of intensity and conflict resolution strategies) are not cleanly separated and false correlations may be created. The reason why strategies for dealing with conflict are included in the definitions, is that it gives the general impression of how a person may actually deal with a particular level of intensity. This model does not attempt to describe to participants how they should have resolved the conflict at each level. The two dimensions are closely intertwined and a particular level of intensity gives rise to certain behavioural strategies in dealing with conflict.

The social desirability bias is a potential confound (Dunham, 1988). Respondents may not want to reveal that they have had a level 3 or 4 interpersonal conflict because having a high level of interpersonal conflict may not be considered socially desirable. To counter this, total confidentiality was guaranteed to all participants. By guaranteeing them anonymity this hopefully facilitated more honest responses.

**Measure 2: Assessment of Prevalence of Interpersonal Conflict at Work**

In the questionnaire respondents were asked to indicate (yes/no) whether they had ever experienced the four levels of conflict in the workplace with a female, male, peer, subordinate and supervisor. To specify that this study was dealing with only interpersonal conflict at work and further only conflict between employees, instruction were given that this questionnaire does not relate to people that you have experienced conflict with outside their workplace e.g. partner, friends, relative and associates etc.

**Measure 3: Assessment of the Frequency of Interpersonal Conflict at Work**

The questionnaire included the following question: how long ago was your most recent experience of interpersonal conflict and at what level of intensity did it reach at its peak? In the last 6 months, 6 to 12 months, 1 to 2 years and over two years.
Measure 4: Assessment of Conflict Resolution styles

Description of Instrument

The instrument used in this study to measure participants' conflict resolution styles (integrating, compromising, avoiding, dominating and obliging) was the Rahim Organisational Conflict Inventory-II (ROC-II). The ROC-II assesses the respondents' conflict management style using a 5-point Likert-type scale from 'Strongly Disagree to 'Strongly Agree'. A higher score indicates greater use of the conflict style. The ROC-II consists of 35 items reflecting five conflict resolution styles. The ROC-II was designed to measure how individuals handle interpersonal conflict with either a supervisor, peer or subordinate. There are currently three forms to the ROC-II, one each to assess conflict with a supervisor, peer or subordinate. Each form has exactly the same items but uses the word supervisor, peer or subordinate to describe whom the referent role is. For the purposes of this study only one questionnaire was used. 'Work colleague' was used instead of supervisor, peer or subordinate to describe the person they were having conflict with.

Validity

Rahim (1983) tested the ROC-II for its construct validity and came back with very impressive results. Responses to the 35 conflict items from the national sample of 1,219 executives (from a range of organisations and at different functional levels) were factor analyzed using principal factoring with iteration and varimax rotation. The analysis extracted eight factors with eigenvalues >1.00. The first five factors were consistent with priori expectations. (Rahim, 1983, p.371). Appendix D shows the factor loadings for the selected items. The five scale scores were constructed by adding item responses in a factor and dividing by the number of items. The intercorrelations among the five scales ranged between -.03 and .33. What needs mentioning is that the sample used to test the validity of the ROC-I-II was all executives. Executives are not representative of the entire work force as it doe not include employees lower down in the organisational structure or from different occupations, thus it may lack external validity.

In Rahim and Magner's (1994) study the convergent and discriminant validity of the ROC-II was tested. Convergent validity for the five sub-scales were evaluated by
determining whether each item had a statistically significant factor loading on its specified factor. All factor loadings were significant, with t ratios ranging from 11.61 and 25.98. These findings support the convergent validity of each sub-scale. For the discriminate validity, the correlation between each pair of factors was constrained to 1.0, and the xB for the constrained model compared with the xB for the unconstrained model. A significantly lower xB for the unconstrained model indicates that the factors are not perfectly correlated, which supports the discriminant validity of the sub-scales.

Reliability of ROC II

Reliability estimates for the five scales of conflict styles are shown in Table 6. Test-retest reliabilities computed from data collected from 119 part-time MBA students, who filled out the ROCI-II twice at an interval of one week, ranged between .60 and .83 (p<.0001).

Social Desirability of ROC - II

The five scales of conflict resolution were correlated with Crowne and Marlowe's (1960, cited in Rahim, 1986) social desirability scale and Eysenck and Eysenck's (1968, cited in Rahim (1986) lie scale to determine the social desirability bias. There was a marginal but significant positive correlation between the integrating scales and social desirability and Lie scale. Other scales did not significantly correlate with the SD and Lie scales.

Table 6: Scale analyses of conflict resolution styles (Rahim, 1983)

<table>
<thead>
<tr>
<th>SCALES OF CONFLICT STYLES</th>
<th>RELIABILITY</th>
<th>SOCIAL DESIRABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test-Retest</td>
<td>Cronbach Alpha</td>
</tr>
<tr>
<td>Integrating</td>
<td>.83</td>
<td>.77</td>
</tr>
<tr>
<td>Obliging</td>
<td>.81</td>
<td>.72</td>
</tr>
<tr>
<td>Dominating</td>
<td>.76</td>
<td>.72</td>
</tr>
<tr>
<td>Avoiding</td>
<td>.79</td>
<td>.75</td>
</tr>
<tr>
<td>Compromising</td>
<td>.60</td>
<td>.72</td>
</tr>
</tbody>
</table>
In looking at how people resolve conflict in an actual conflict situation, respondents were instructed to think of their most recent case of interpersonal conflict in the workplace and to state the level of intensity it reached at its peak. Respondent were then asked to complete the ROC - II and aggression questions, thinking of how they tried to resolve this recent experience of conflict when it was at its peak.

**Measure 5: Assessment of Aggressive Conflict Resolution Style**

In developing an aggressive conflict resolution style Volkema and Bergmann's (1989) study of behaviour responses in conflict situations was used to develop the aggression questions. The six behavioural responses, described in the introduction (listed below), are used in this study to reflect an aggressive conflict resolution style. The six behavioural responses were formulated into questions similar to that of the ROCI-II. Listed below are the six behavioural responses and the reformatted questions. In designing the aggressive conflict resolution questions, Murphy's (1995) covert and overt definitions of aggression were taken into consideration. Covert aggression is where the actions of the aggressive person are done in a way that conceals his/her identity from the target person. Overt aggression is where the actions of the aggressive person are not concealed from the target person. The aggressive conflict resolution questions designed reflect both overt and covert types of aggression as defined by Murphy (1995). Questions 1, 4 and 6 represent covert forms of aggression, while questions 2, 3 and 5 represent overt forms of aggression.

1. Sabotage the persons work
   - I have attempted to and/or have sabotaged a person or persons work when I can't get my own way.

2. Throw things
   - I throw objects at the person or persons when I get into a conflict situation.

3. Push, strike, or punch the person
• I have pushed, struck or punched a person or persons when we have got into a conflict situation.

4. Try to get even
• I somehow try to get even with the conflict person or persons.

5. Loudly shout at the person
• I usually shout at the person or persons when we get into conflict situation.

6. Somehow try and get the person to leave their job or company
• I have vigorously tried to or have got the person to leave their job or company.
2.3 Procedure

Ethical approval for the research project was gained from the Massey University Human Ethics Committee. Letters requesting permission to carry out research were sent to the Human Resources Department of the two organisations, which participated in the researcher's study. Appendix C. They were told that the study would be researching conflict in the workplace and that participation in this study required participants to fill in one questionnaire, which would take between 20 - 30 minutes. The Human Resource Departments were also sent a copy of the participant information sheets, which potential participants would read prior to completing the questionnaire.

Questionnaires, information sheets and self-addressed stamped envelopes were sent out to employees via the respective organisations internal mail system. General instructions for completing the questionnaire were provided and informed respondents that the competed questionnaire would be taken as their consent to participate in the study. It was explained to participants that participation in this study was voluntary. Participant confidential was assured as they were not required to put their names on the questionnaire, which was then sent directly to the researcher. Respondents were requested to return the completed questionnaire in a self-addressed stamped envelope.
3. Results

The statistical package chosen for the analysis of the data was SPSS* (Statistical Package for the Social Sciences). SPSS* was chosen over other statistical packages like BMDP, SAS and SYSTAT because of the user-friendly nature of the program (Grazanio & Raulin, 1993).

The following statistical techniques were used to investigate the research questions and test the hypotheses; means analysis, chi-squared test and McNemar test. Means analysis was used to test if there were significant differences could be discovered between the means of specific groups, such for as men and woman for the aggressive conflict resolution style. Chi squared tests are used in research when the null hypotheses are dealing with frequency data, as in this study. The chi-square is based on the differences between observed and expected frequencies for each response category (Keppel, Saufley & Freeman, 1980). McNemar test determines independence between the two variables in question, by testing whether or not the proportion of cases in each of the two categories in one group, is the same as the proportion in the second group (Bowers, 1997).

3.1 Analysis of the Prevalence of Interpersonal Conflict in the Workplace

In analysing the data it was found that only small number of participants stated that they had experienced a certain level of conflict, e.g. level 2, but that they had not experienced a lesser level of conflict, e.g. level 1. This research project asserts that interpersonal conflict within a dyadic relationship happens in the form of an escalation process, where a person upon reaching a high level of intensity must have been through the lower levels of intensity before reaching the high level of intensity. Therefore, for all those participants who stated that they had experienced certain levels of conflict it was assumed that they also had experienced the lower levels of conflict and the data presented in this study reflects this.
Research Question 1: What is the prevalence of interpersonal conflict in the workplace at various levels of intensity?

Percentages were calculated to see how much the overall level of conflict was experienced at each level and for males and females. The percentage of participants experiencing the four levels of interpersonal conflict at work was level 1 - 98.4%, level 2 - 86.45%, level 3 - 49.6% and level 4 - 15.4% (Table 2). The percentage of males and females experiencing the four levels of interpersonal conflict at work was level 1 - males 100% & females 97.06%, level 2 - males 85.20% & females 86.76%, level 3 - males 43.64% & females 55.88% and level 4 - males 12.73% & females 16.18%. A chi-squared test found no significant differences in the amount of conflict experienced between men and women for the four levels. Table 7 and Figure 1 demonstrates this.

Figure 1: Total prevalence of interpersonal conflict in the workplace and for males and females
Table 7: Percentage of conflict experienced at each of the four levels of conflict.

<table>
<thead>
<tr>
<th>Conflict Level</th>
<th>Total % (N=123)</th>
<th>Males % (N=55)</th>
<th>Females % (N=66)</th>
<th>Difference Between Men &amp; Women</th>
<th>Likelihood Ratio</th>
<th>df</th>
<th>(Exact Sig. 1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>98.4</td>
<td>100</td>
<td>97.06</td>
<td></td>
<td>2.453</td>
<td>1</td>
<td>.295</td>
</tr>
<tr>
<td>Level 2</td>
<td>86.2</td>
<td>85.45</td>
<td>86.76</td>
<td></td>
<td>0.021</td>
<td>1</td>
<td>.545</td>
</tr>
<tr>
<td>Level 3</td>
<td>49.6</td>
<td>43.64</td>
<td>55.88</td>
<td></td>
<td>1.431</td>
<td>1</td>
<td>.156</td>
</tr>
<tr>
<td>Level 4</td>
<td>15.4</td>
<td>12.73</td>
<td>16.18</td>
<td></td>
<td>0.371</td>
<td>1</td>
<td>.366</td>
</tr>
</tbody>
</table>

The drop in the amount of conflict between level 1 and 2 was 12.2%, between level 2 and 3 36.6% and lastly between level 3 and 4, 34.2%. McNemar tests were conducted to see whether there were significant differences in the amount of conflict between each of the four levels. These tests found that there was a significant difference between each of the four levels as can be seen in Table 8. This finding supported the research assumption that at low levels (intensity) of conflict the prevalence will be relatively high, but as the levels of (intensity) conflict increases the prevalence of conflict in the workplace would decrease.

Table 8: Differences between each of the four levels of conflict

<table>
<thead>
<tr>
<th>Levels of Conflict</th>
<th>Percentage Decrease</th>
<th>Exact Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 ⇒ Level 2</td>
<td>12.2%</td>
<td>.016</td>
</tr>
<tr>
<td>Level 2 ⇒ Level 3</td>
<td>36.6%</td>
<td>.000</td>
</tr>
<tr>
<td>Level 3 ⇒ Level 4</td>
<td>34.2%</td>
<td>.000</td>
</tr>
</tbody>
</table>
Research Question 2: How frequent are episodes of interpersonal conflict in the workplace and at what levels?

The proportion of participants experiencing their most recent case of interpersonal conflict in the workplace at the various time periods were: last six months = 61.61%, previous six to twelve months = 19.17%, previous one to two years = 12.5%, over two years ago = 6.67%. Table 9 presents the levels of intensity in conflict and their frequency.

Table 9: Frequency and levels of Interpersonal Conflict in the Workplace

<table>
<thead>
<tr>
<th>Level of Conflict</th>
<th>Interpersonal Conflict At Work (N=120)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-6 Months %</td>
</tr>
<tr>
<td>Total Conflict</td>
<td>61.67</td>
</tr>
<tr>
<td>Level 1</td>
<td>18.33</td>
</tr>
<tr>
<td>Level 2</td>
<td>29.17</td>
</tr>
<tr>
<td>Level 3</td>
<td>12.5</td>
</tr>
<tr>
<td>Level 4</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Research Question 3: At what functional relationship (superior to subordinate, between peers and subordinate to supervisor) is interpersonal conflict most prevalent and at what levels of intensity?

Percentages were calculated to see how much conflict was experienced for each functional group, at each level and its interaction according to gender. Results are presented in Table 10. At conflict level 1 and 2, peers had the highest amount of conflict at 95.04% and 66.12% respectively, followed by supervisors, at 80.99% and 61.98% respectively and subordinates at 49.56% and 27.27% respectively. At conflict level 3 and 4 the order is reversed with peers and supervisors, with supervisors being the most prevalent at 38.02% and 11.57% respectively, followed by peers at 16.53% and 2.4% and lastly subordinates at 6.6% and 0.8% respectively. The prevalence in interpersonal
conflict at each functional group is best demonstrated in figure 2 where the change in the amount of conflict for supervisor and peers between level 2 and 3 is clearly visible.

A chi-square test was conducted to see whether there were any differences in the amount of conflict men and women experienced in the three functional groups at each level. Only one significant difference was found between males and females, this being the subordinate functional group at level 2 ($P = < .05$). Table 10 demonstrates this. McNemar tests were conducted to determine whether there were significant differences in the amount of conflict people experience with each functional group at each level. Table 11 demonstrates these findings. At level 1 people experience significantly more conflict with peers than both supervisors ($P = < .000$) and subordinates ($P = < .000$). At level 2 there is no significant difference in the amount of conflict people experience with peers and supervisors ($P = .461$). People experience significantly more conflict with both peers and supervisors than subordinates ($P = < .000$ and $P = < .000$ respectively). At level 3 and 4 people experience significantly more conflict with supervisors than both peers ($P = < .000$ and $P = < .05$ respectively) and subordinates ($P = < .000$ and $P = < .000$ respectively).

**Table 10: Prevalence of interpersonal conflict for functional work groups and gender effects**

<table>
<thead>
<tr>
<th>Conflict Level</th>
<th>Total %</th>
<th>Male %</th>
<th>Fem. %</th>
<th>Differe. Between Males and females Exact Sig (1-sdied)</th>
<th>Total %</th>
<th>Male %</th>
<th>Fem. %</th>
<th>Differe. Between Males and females Exact Sig (1-sdied)</th>
<th>Total %</th>
<th>Male %</th>
<th>Fem. %</th>
<th>Differe. Between Males and females Exact Sig (1-sdied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>80.99</td>
<td>81.81</td>
<td>80.3</td>
<td>.51</td>
<td>95.04</td>
<td>94.45</td>
<td>95.45</td>
<td>.57</td>
<td>49.59</td>
<td>54.54</td>
<td>45.45</td>
<td>.21</td>
</tr>
<tr>
<td>Level 2</td>
<td>61.98</td>
<td>63.63</td>
<td>60.61</td>
<td>.44</td>
<td>66.12</td>
<td>65.45</td>
<td>66.66</td>
<td>.52</td>
<td>27.27</td>
<td>38.18</td>
<td>18.18</td>
<td>.01</td>
</tr>
<tr>
<td>Level 3</td>
<td>38.02</td>
<td>32.7</td>
<td>42.42</td>
<td>.183</td>
<td>16.53</td>
<td>14.54</td>
<td>18.18</td>
<td>.39</td>
<td>6.6</td>
<td>7.27</td>
<td>6.06</td>
<td>.54</td>
</tr>
<tr>
<td>Level 4</td>
<td>11.57</td>
<td>10.9</td>
<td>12.12</td>
<td>.53</td>
<td>2.4</td>
<td>3.63</td>
<td>1.5</td>
<td>.43</td>
<td>0.8</td>
<td>0</td>
<td>1.5</td>
<td>.55</td>
</tr>
</tbody>
</table>
Table 11: Differences in the amount of conflict for each functional group with each level of conflict.

<table>
<thead>
<tr>
<th>Functional Group</th>
<th>Exact Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1</td>
</tr>
<tr>
<td>Peers vs. Subordinate</td>
<td>.000</td>
</tr>
<tr>
<td>Peers vs. Supervisors</td>
<td>.000</td>
</tr>
<tr>
<td>Supervisors vs. Subordinates</td>
<td>.000</td>
</tr>
</tbody>
</table>

Figure 2: Prevalence of interpersonal conflict in the workplace for supervisors, peers and subordinates at the four levels of conflict.
Research Question 4: Which gender combinations (male to male, male to female, female to female and female to male) have the highest amount of conflict and at what levels of intensity?

Percentages were calculated to see how much conflict men and women experienced with other men and women at each of the four levels. A distinct trend was found for conflict experienced by men (Table 12). For conflict levels 1 to 4 men experienced predominately more conflict with other men than with women (Level 1 - 92.73% & 83.64%, level 2 - 70.91% & 56.36%, level 3 - 30.91% & 20% and level 4 - 10.9% & 3.6% respectively). No clear trend was found for amount of conflict experienced by women with other women and men. At level one women experience predominantly more conflict with other women than with men (93.94% & 75.75%), at level 2 they are similar (men - 65.15% & women - 62.12%), but then at level 3 there is a change. Women experience predominantly more conflict with men than with other women (men - 39.39% & women - 24.24%). Lastly at level 4 women experience exactly the same amount of conflict with both men and women (9.1%).

McNemar tests were conducted to see whether there were significant differences between the amount of conflict men and women experienced with both genders. Only one significant statistical difference was found, that being females experiencing significantly more level 1 conflict with other females than with males. Table 12 demonstrates these results.

Table 12: Prevalence of interpersonal conflict for males and females with their respective genders.

<table>
<thead>
<tr>
<th>Conflict Level</th>
<th>Males %</th>
<th>Females %</th>
<th>Exact Sig. (2-sided)</th>
<th>Males %</th>
<th>Females %</th>
<th>Exact Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>92.73</td>
<td>83.64</td>
<td>.267</td>
<td>75.75</td>
<td>93.94</td>
<td>.004</td>
</tr>
<tr>
<td>Level 2</td>
<td>70.91</td>
<td>56.36</td>
<td>.152</td>
<td>65.15</td>
<td>62.12</td>
<td>.856</td>
</tr>
<tr>
<td>Level 3</td>
<td>30.91</td>
<td>20.0</td>
<td>.263</td>
<td>39.39</td>
<td>24.24</td>
<td>.099</td>
</tr>
<tr>
<td>Level 4</td>
<td>10.9</td>
<td>3.6</td>
<td>.22</td>
<td>9.1</td>
<td>9.1</td>
<td>1</td>
</tr>
</tbody>
</table>
3.2 Analysis of Conflict Resolutions Styles

Pre-screening of participant responses to the work conflict questionnaire found that eight participants did not answer sufficient number of questions to be included in the data analysis. Therefore data from the remaining 113 participants was further analysed.

Prevalence of Conflict Resolution Styles Used.

Participants' scores on each of the six conflict resolution styles were summarized and averaged to give a mean score on each of the style regardless of functional relationship, gender and level of conflict. The maximum mean score possible for each individual conflict resolution style is five while the minimum possible score was one. A higher score indicates the higher use of that conflict resolution style. Refer to Table 13.

Hypothesis 5: Integrating style of conflict resolution will be the most used conflict resolution style.

Hypothesis 6: Aggression style of conflict resolution will be the least used conflict resolution style.

The results confirm hypothesis five and six. Refer to Table 13. The most used style of resolving conflict in this study was integrating, followed by compromising, avoiding, obliging, dominating and aggression.

When the referent role is both a peer and supervisor the most used styles are integrating followed by compromising, avoiding, obliging, dominating and aggression. When the referent role is a peer the most used style is integrating followed by compromising, avoiding, obliging, dominating and aggression. When the referent role is a subordinate the most used style is integrating followed by compromising, obliging, avoiding, dominating and aggression. Figure 3 illustrates these findings.

Hypothesis 1: Obliging style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate.
The results confirm hypothesis 1 where an obliging style of conflict resolution was highest when dealing with a supervisor \((m = 3.38)\) followed by a subordinate \((m = 3.26)\) and peer \((m = 3.16)\). However the difference in means were not significant \((R = 0.206, p = 0.39)\).

**Hypothesis 2:** *Avoiding style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate.*

**Hypothesis 4:** *Avoiding style of conflict resolution will be chosen less often with a subordinate than with a peer or supervisor.*

The results do not support hypothesis 2, but confirm hypothesis 4. An avoiding style of conflict resolution was highest when dealing with a peer \((m = 3.37)\), followed by a supervisor \((m = 3.20)\) and subordinate \((m = 2.95)\). However the differences in means were not significant \((R = 0.145, p = 0.09)\).

**Hypothesis 3:** *Dominating style of conflict resolution will be chosen more often with a subordinate than with a peer or supervisor.*

The results confirm hypothesis 3. A dominating style of conflict resolution was highest when dealing with a subordinate \((m = 2.93)\) followed by a peer \((m = 2.83)\) and supervisor \((m = 2.78)\). However the differences in means were not significant \((R = 0.172, p = 0.82)\).

An *integrating* style of conflict resolution was highest when dealing with a subordinate \((m = 4.00)\), followed by a supervisor \((m = 3.91)\) and peer \((m = 3.81)\). However the differences in means were not significant \((R = 0.142, p = 0.31)\). A *compromising* style of conflict resolution was highest when dealing with a subordinate \((m = 3.62)\), followed by a peer \((m = 3.53)\) and supervisor \((m = 3.51)\). However the differences in means were not significant \((R = 0.144, p = 0.45)\). An *aggressive* style of conflict resolution was highest when dealing with a subordinate \((m = 1.33)\), followed by a peer \((m = 1.26)\) and supervisor \((m = 1.23)\). However the differences in means were not significant \((R = 0.217, p = 0.55)\).
Table 13: Means Scores for Conflict Resolution Styles

<table>
<thead>
<tr>
<th>Functional Group</th>
<th>Conflict Resolution Style (Average Mean Score, Max=5 - Min=1)</th>
<th>Avoiding</th>
<th>Obliging</th>
<th>Comprom.</th>
<th>Integrate.</th>
<th>Aggression</th>
<th>Dominating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (N=40)</td>
<td></td>
<td>3.20</td>
<td>3.38</td>
<td>3.51</td>
<td>3.91</td>
<td>1.23</td>
<td>2.78</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>2.97</td>
<td>3.39</td>
<td>3.47</td>
<td>3.86</td>
<td>1.26</td>
<td>2.89</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>3.37</td>
<td>3.37</td>
<td>3.54</td>
<td>3.95</td>
<td>1.21</td>
<td>2.70</td>
</tr>
<tr>
<td>Peer</td>
<td></td>
<td>3.37</td>
<td>3.16</td>
<td>3.43</td>
<td>3.81</td>
<td>1.26</td>
<td>2.83</td>
</tr>
<tr>
<td>Total (N=62)</td>
<td></td>
<td>3.42</td>
<td>3.02</td>
<td>3.40</td>
<td>3.86</td>
<td>1.28</td>
<td>2.92</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>3.32</td>
<td>3.19</td>
<td>3.45</td>
<td>3.77</td>
<td>1.25</td>
<td>2.75</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinate</td>
<td></td>
<td>2.95</td>
<td>3.26</td>
<td>3.62</td>
<td>4.00</td>
<td>1.33</td>
<td>2.96</td>
</tr>
<tr>
<td>Total (N=11)</td>
<td></td>
<td>2.91</td>
<td>3.46</td>
<td>3.73</td>
<td>4.09</td>
<td>1.33</td>
<td>2.86</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>3.00</td>
<td>2.71</td>
<td>3.33</td>
<td>3.76</td>
<td>1.33</td>
<td>3.24</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (N=113)</td>
<td></td>
<td>3.27</td>
<td>3.22</td>
<td>3.48</td>
<td>3.86</td>
<td>1.26</td>
<td>2.82</td>
</tr>
</tbody>
</table>

Figure 3: Total Mean Scores for Conflict Resolution Styles Related to Functional Groups
Research Question 5: How does the level (intensity) of interpersonal conflict experienced influence the style of conflict resolution used?

An analysis of variance was conducted to see whether people adjusted their use of the conflict resolution styles depending on the level of conflict (intensity) experienced.

Obliging

The level of conflict was found to significantly change the use of the obliging style ($R = 0.206$, $P < .05$). Figure 4 best demonstrates this trend. At levels 1 to 3 the use of the obliging style remains basically the same, but as the level of conflict moves to level 4 the obliging style is used significantly more.

Avoiding

The level of conflict was found to have no significant influence on the use of an avoiding style ($R = 0.145$, $P = 0.57$). Although there was no significant variance found with the use of avoiding conflict resolution style and levels of conflict, there is a clear trend which is demonstrated in Figure 5: as the level of conflict increases from 1 through to 4 the use of an avoiding style of conflict resolution increases.

Integrating

The level of conflict was found to have no significant influence on the use of an integrating style ($R = 0.142$, $P = 0.19$). No clear trend can be found for the use of an integrating style of conflict resolution as the level of conflict changes, as presented in Figure 6.

Compromising

The level of conflict was found to have no significant influence on the use of a compromising style ($R = 0.144$, $P = 0.21$). No clear trend can be found for the use of a
compromising style of conflict resolution as the level of conflict changes, as presented in Figure 7.

**Dominating**

The level of conflict was found to have no significant influence on the use of a dominating style ($R = 0.172, P = 0.71$). No clear trend can be found for the use of a dominating style of conflict resolution as the level of conflict changes, as presented in Figure 8.

**Aggression**

The level of conflict was found to significantly change the use of the aggression style ($R = 0.217, P < .05$). Figure 9 illustrates this result. As the levels of intensity increase, the use of the aggression style of conflict resolution increases.

![Figure 4: Mean scores by conflict level for obliging conflict resolution style](image)
Figure 5: Mean scores by conflict level for avoiding conflict resolution style

Figure 6: Mean scores by conflict level for integrating conflict resolutions
Figure 7: Mean scores by conflict level for compromising conflict resolution style

Figure 8: Mean scores by conflict level for dominating conflict resolution style
Research Question 6: Is the relationship between levels (intensity) of interpersonal conflict and style of conflict resolution moderated by gender?

An analysis of variance was conducted to see whether the relationship between levels of interpersonal conflict and conflict resolution style was moderated by gender.

Obliging

No significant differences were found between males and females in the relationship between levels of conflict and obliging resolution style ($R = 0.206, p = 0.47$). Figure 4 demonstrates this finding.
**Avoiding**

No significant differences were found between males and females in the relationship between levels of conflict and avoiding resolution style \( (R = 0.145, P = 0.94) \). Figure 5 demonstrates this finding.

**Integrating**

No significant differences were found between males and females in the relationship between levels of conflict and conflict resolution style \( (R = 0.142, p = 0.18) \). Figure 6 demonstrates this finding. Although no significant variance was found in this interaction the findings suggest that men use an integrating style of conflict resolution more when it is at a lower level of conflict, whereas women tend to use an integrating style of conflict resolution at a higher level of conflict.

**Compromising**

No significant differences were found between males and females in the relationship between levels of conflict and compromising resolution style \( (R = 0.142, p = 0.18) \). Figure 7 demonstrates this finding.

**Dominating**

No significant differences were found between males and females in the relationship between levels of conflict and dominating resolution style \( (R = 0.172, p = 0.53) \). Figure 8 demonstrates this finding.

**Aggression**

Significant differences were found between males and females in the relationship between levels of conflict and dominating resolution style \( (R = 0.217, P = < .05) \). Figure 9 best demonstrated this trend, where the differences between males and females are clearly demonstrated. From levels 1 to 4 females use the same amount of aggression to
resolve their conflict. For males this trend changes when it reaches level 4 where there is a dramatic increase in the use of aggression to resolve conflict.

**Research Question 7:** Is the relationship between levels (intensity) of interpersonal conflict and style of conflict resolution moderated by functional relationship?

No significant differences were found between functional relationships in the relationship between levels of conflict and conflict resolution styles: obliging (R = 0.206, P = 0.46), avoiding (R = 0.145, P = 0.84), integrating (R = 0.142, P = 0.89), compromising (R = 0.144, P = 0.49), dominating (R = 0.172, P = 0.91) and aggression (R = 0.217, P = 0.53).

Figures 10 and 11 demonstrate the use of the six conflict resolution styles related to increasing levels of conflict, for males and females respectively.

**Reliability of Aggression Scale**

Reliability analysis shows that the aggression scale is high in reliability. See Table 14.

**Table 14: Reliability Analysis of Aggression Scale**

<table>
<thead>
<tr>
<th>Aggression Questions</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 5</td>
<td>6.3017</td>
<td>4.1082</td>
<td>.3590</td>
<td>.6181</td>
</tr>
<tr>
<td>Question 9</td>
<td>6.4655</td>
<td>4.8423</td>
<td>.3689</td>
<td>.6415</td>
</tr>
<tr>
<td>Question 15</td>
<td>6.4138</td>
<td>4.5925</td>
<td>.2735</td>
<td>.6443</td>
</tr>
<tr>
<td>Question 18</td>
<td>6.0000</td>
<td>2.9565</td>
<td>.5536</td>
<td>.5336</td>
</tr>
<tr>
<td>Question 24</td>
<td>6.1724</td>
<td>3.5700</td>
<td>.3910</td>
<td>.6107</td>
</tr>
<tr>
<td>Question 35</td>
<td>6.1897</td>
<td>3.5289</td>
<td>.4644</td>
<td>.5765</td>
</tr>
</tbody>
</table>

Reliability Coefficients

N of Case = 116.0  No of Items = 6  Alpha = .6525
Figure 10: Prevalence of males' conflict resolution styles against levels of conflict
Figure 11: Prevalence of females' conflict resolution styles against levels of conflict
4. DISCUSSION

4.1 Summary of Findings

Research Questions

1. What is the prevalence of interpersonal conflict in the workplace at various levels of intensity?

This study found that the prevalence of interpersonal conflict in the workplace is very high. Nearly all participants had experienced conflict level 1 at some stage in their careers, with the prevalence of interpersonal conflict significantly decreasing as each level increased to level 4. At conflict level 4 over 1 in 6 people had experienced conflict at some stage in their working careers.

2. How frequent are episodes of interpersonal conflict in the workplace and at what levels of intensity?

This study found that over 60% of participants had experienced some level of interpersonal conflict in the workplace in the last six months, and that this percentage increased to over 80% when the time frame was extended to experiencing interpersonal conflict in the last year.

3. At what functional relationship (superior to subordinate, between peers and subordinate to supervisor) is interpersonal conflict most prevalent and at what levels of intensity?

At conflict level one participants experienced significantly more interpersonal conflict with peers than both supervisor and subordinates. At conflict level two participants experienced the same amount of conflict with both supervisors and peers, but both significantly more than subordinates. At conflict levels three and four, participants experienced significantly more conflict with supervisors than both peers and subordinates.
4. Which gender combinations (male to male, male to female, female to female and female to male) have the highest amount of conflict and at what levels of intensity?

This study found that males tend to experience more interpersonal conflict with other males rather than females at each of the four conflict levels. Females experience more conflict at level one with other females rather than with males, but that this trend is unclear as females experience the same amount of conflict for level 2 with both males and females, then experience more conflict with males at level 3 and then lastly experience that same amount with both females and males at level 4.

5. How does the level (intensity) of interpersonal conflict experienced influence the style of conflict resolution used?

This study found that as the intensity of the conflict increases from conflict level 1 through to conflict level 4, the use of the obliging and avoiding styles of conflict resolution increases. An aggressive style of conflict resolution was also found to increase as the intensity of the conflict increased. However this interaction was moderated by gender. Refer to research question 6. No clear trends were found for the use of dominating, integrating and compromising conflict resolution styles.

6. Is the relationship between levels (intensity) of interpersonal conflict and styles of conflict resolution moderated by gender?

This study found that the interaction between conflict levels and the use of an aggressive style of conflict resolution was moderated by gender. The use of the aggressive style of conflict resolution stays basically the same for females, regardless of the level of conflict. However for males the trend is different. The use of the aggressive style of conflict resolution stays basically the same from conflict level 1 through to conflict level 3, but then as the intensity of the conflict increases to level four, the use of the aggressive style of conflict resolution dramatically increases. The use of the integrating style of conflict resolution was found to be higher for males when the conflict level was low and higher for females when conflict level was high. No clear trends were found for the use of dominating, avoiding obliging, and compromising conflict resolution styles.
7. *Is the relationship between levels (intensity) of interpersonal conflict and styles of conflict resolution moderated by the functional relationship?*

This study found that the relationship between levels (intensity) of interpersonal conflict and styles of conflict resolution was not moderated by the functional relationship.

**Hypotheses**

- Hypothesis one that an *obliging style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate* was confirmed.
- Hypothesis two that an *avoiding style of conflict resolution will be chosen more often with a supervisor than with a peer or subordinate* was not confirmed.
- Hypothesis three that a *dominating style of conflict resolution will be chosen more often with a subordinate than with a peer or supervisor* was confirmed.
- Hypothesis four that an *avoiding style of conflict resolution will be chosen less often with a subordinate than with a peer or supervisor* was confirmed.
- Hypothesis five that an *integrating style of conflict resolution will be the most used conflict resolution style* was confirmed. The integrating style of conflict resolution was the most prevalent for all functional relationships.
- Hypothesis six that an *aggressive style of conflict resolution will be the least used conflict resolution style* was confirmed. The aggressive style of conflict resolution was the least prevalent for all functional relationships.
4.2 Discussion on Findings

4.2.1 Prevalence of Interpersonal Conflict in the Workplace

The finding of a high level of prevalence of interpersonal conflict in the workplace is not surprising. Martin and Bergmann (1996) stated that over the last few decades interpersonal conflict has become a normal event within a complex work environment and this study confirms this. The findings suggest that there is a high level of interpersonal conflict in the workplace and nearly all employees have experienced it in an organisational context.

In looking at the sample used for this study the normality of such a high amount of interpersonal conflict can be explained. The mean age of participants in this study was thirty-eight. It can be assumed that the age at which people first enter the work force is eighteen years of age. This means that on average participants had over twenty years of experience in the workforce. In twenty years of experience in the workplace it is natural to assume that in that time people would have experienced some form of conflict. This study confirms Myers (1993) assertion that people and groups are so intertwined that interpersonal conflict is a natural and inevitable human process.

In comparing the findings of this study on the prevalence of interpersonal conflict with other conflict research, it is difficult to make substantial comments given the limited research available. However compared with the findings of Volkema and Bergmann's (1989) research on interpersonal conflict, it can be seen that the amount of interpersonal conflict between the two studies is similar. Their study found that 84.4% of participants had experienced interpersonal conflict in the workplace. However, their study gave only one definition of interpersonal conflict and did not specify levels of intensity. In comparing the two findings, it can be seen their finding is very similar to the amount of interpersonal conflict found at conflict level two (86.2%).

In comparing the findings of this study with that of Appelberg et al (1991) research on interpersonal conflict in the workplace, it can be seen that the results are again similar. Their study found that 14.2% of participants had 'experienced considerable difficulties
with either a co-worker or superior during their working careers'. This figure is similar to the amount of interpersonal conflict participants experienced at conflict level 4 (15.4%). In comparing the two definitions it can be seen that this study's definition of conflict level 4 has more intensity to it than that of Appelberg et al (1991). This suggests that the prevalence of interpersonal conflict in their study was considerably less than this study.

To gain a more realistic interpretation of the prevalence of interpersonal conflict in the workplace, the data on the frequency at which it occurs needs discussing. The finding that over 60% of participants had experienced conflict in the workplace in the last six months is staggering and that from this 60%, over 40% were at conflict levels two and three. The high degree of interpersonal conflict experienced in the last six months by participants, gives a clear indication of the magnitude of the problem of interpersonal conflict faced in today's organisation. From the context of earlier studies, the numbers of affected organisations and the intensity of conflict has increased over time (Leather, Cox & Farnsworth, 1990). Certainly, as stated earlier, interpersonal conflict in the workplace can be both functional and dysfunctional to organisation (Rahim, 1985, 1992; Bergmann & Vokema, 1989; Martin & Bergmann, 1996; Riggio, 1996; Borisoff, 1998; Tidwell, 1998), but this high level of interpersonal conflict must be questionable as to whether it can be productive to an organisation.

Although the number of people having experienced conflict level 4(15.4%) at some stage in their working careers is high, the frequency at which people experience this level of conflict is much lower. This study found that only 5% of participants reported that their most recent case of interpersonal conflict in the workplace (over two years ago) was level 4. From the data it can seen that there is a significant decrease in the amount of conflict people have recently experienced at conflict levels one to level three, through to level 4 conflict. This finding suggests that although a high degree of interpersonal conflict exists in organisations, the frequency at which level four conflict occurs is infrequent.

In discussing the prevalence of interpersonal conflict in the workplace in terms of functional relationships, some contextual issues need to be discussed first. It can be considered that in most organisational structures the vast majority of employees have substantially more peers/co-workers than supervisors, and that substantially more
employees have supervisors than employees who have subordinates. Thus, given all things are equal, people are more likely to have experienced conflict with a peer than any other functional group, simply because there are more people to potentially have conflict with. In light of this contextual issue, the amount of people experiencing interpersonal conflict with a supervisor compared to a peer has greater significance.

People in this study experienced significantly more level three and four conflict with a supervisor than with any other functional group, including peers. This finding is surprising given the contextual issues just discussed. Furthermore, this study found that of all the functional relationships, the lowest amount of interpersonal conflict found was with people experiencing conflict with subordinates. Given that all things are equal, you would expect to find that if one person is experiencing conflict, you would expect the other to experience the conflict as well. However, this study found that people experience significantly more conflict with a supervisor, than a person experiencing conflict with a subordinate.

In light of this finding the behavioural dynamics behind this dyadic relationship (employee to supervisor) compared to other dyadic relationships (peer to peer, supervisor to subordinate) must be different to stimulate more interpersonal conflict. As stated earlier Perrealt and Miles (1978, cited in Drory & Ritov, 1997) asserted that the conflict resolution strategies between dyads in organisations are clearly based on the dimensions of power, authority and degree of control. Perhaps the psychological feelings associated with being under someone's power, control and authority stimulates more interpersonal conflict than other functional relationships.

The finding that there was no significant difference in the amount of interpersonal conflict found experienced at each of the four levels is consistent with Appelberg et al (1996) research. When asked whether men and women have experienced considerable difficulties with a work colleague, their study found that men and women had experienced the same amount of interpersonal conflict in the workplace. However, given the limited research into the amount of interpersonal conflict experienced in a working context, this finding must be taken with some caution. Seth (1994) stated that there was a consistent notion that the male culture is overtly more competitive and aggressive and
that males are primed to be competitive from an early age. However this study did not support Seth's (1994) statement.

To gain a better understanding of the differences between men and women in interpersonal conflict the prevalence experiencing conflict with their respective genders needs to be discussed. The finding that men experience a higher amount of conflict with other men than with women is congruent with previous research between conflict and gender interactions (Seth, 1994; Martin & Bergmann, 1996). Martin and Bergmann (1996) found that the only conflict combination to reach phase 2 of Glasl's (1982) escalation process was male to male conflict. Although this study found that all gender combinations had reached level 4 conflict, a higher amount was experienced for the male to male interaction, than the male to female interaction for all levels of conflict. These findings are congruent with Martin and Bergmann's (1996) assertion that men, consistent with the social role theory, tend to experience more conflict with other men because when faced with a conflict situation they feel it is important to protect their male image. Seth's (1994) research on the differences between men and women in conflict is consistent with the findings of this study. Seth (1994) stated that culturally, males are encouraged to respond to females in guilt-oriented, overly protective ways that provoke displacement of hostility for them onto themselves and other males.

This study also found that women experience significantly more interpersonal conflict with other women at level 1 conflict. In explaining this finding it is plausible to assume that women may be more naturally competitive towards other women. Seth (1994) states that men are naturally more aggressive and competitive than women. Perhaps because of this theory, women subconsciously don't put themselves into a situation where they could possibly experience conflict with men. Perhaps women are more likely to put themselves into a conflict situation with other women, because they feel more on equal footing with other women, compared to men. This would explain the difference between the amount of conflict women experience between men and women. However, the trend at which woman experienced interpersonal conflict with both males and females varied over the four levels.
4.2.2 Interpersonal Conflict Escalation Process

The escalation process data meets prior expectations that at a low level (intensity) of conflict the prevalence would be high, but as the level of conflict increased the prevalence of the conflict would decrease. The data showed significant decreases in the amount of conflict people experienced from one level to the next. The fact that there were significant differences between each of the four conflict levels demonstrates that each level's definition was cleanly separated from others. If there were similar amounts of prevalence between any of the levels, then it could be said that each definition was measuring the same intensity of conflict. However in this study this was clearly not the case.

4.2.3 Prevalence of Conflict Resolution Styles

The prevalence of the six conflict resolution styles in this study had mixed results. The finding that an integrating style of conflict resolution was the most prevalent style is consistent with other research (Rahim, 1992; Pokrajac-Bulian, Kardum & Suasanj, 1996). In comparing the findings of this study with Rahim's (1992) extensive research on conflict resolution styles, it can be seen that they are similar. See Table 15.

Table 15: Prevalence of conflict resolution styles for Rahim (1992) study and for present study

<table>
<thead>
<tr>
<th>Most used conflict resolution style.</th>
<th>Rahim (1992)</th>
<th>Present Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Integrating</td>
<td>Integrating</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Compromising</td>
<td>Compromising</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Obliging</td>
<td>Avoiding</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Dominating</td>
<td>Obliging</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Avoiding</td>
<td>Dominating</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt;</td>
<td></td>
<td>Aggression</td>
</tr>
</tbody>
</table>
New Zealand is an individualistic and low-context culture and that implies that people tend to deal with conflict issues directly. Thus, the integrating style of conflict resolution being the most prevalent was expected. However the use of the integrating style was significantly used less than in Rahim's (1992) study.

In relation to this finding it needs mentioning that the integrating style of conflict resolution was the only style to significantly correlate with the social desirability bias, as discussed in the method section. The integrating style of conflict resolution is obviously the most socially desirable form of resolving conflict. Therefore it is questionable whether the integrating style conflict resolution figure has high external validity.

The general findings of this study are not congruent with Hui's (1988, cited in Myers, 1996) individualism - collectivism theory on conflict resolution styles. New Zealand is an individualistic and low-context culture which means that when attempting to resolve a conflict situation people will give priority to one's self over the concerns for the conflict person. Individualistic cultures are said to use dominating and obliging styles of conflict resolution that reflects the ratio of concerns to one's self over the other party.

However the findings of this study are consistent with a collectivist culture where the conflict resolution process between a dyad relationship attempts to keep both parties satisfied. The second most used style of conflict resolution, and consistent with Rahim's (1992) findings, was the compromising style. Thus, integrating and compromising have a high and moderate degree of concern to one's self and the other party respectively, which is consistent with a collectivist culture.

What is surprising is that the dominating style of conflict resolution was under-used in this study. A dominating style of conflict resolution is where a person has high concern for satisfying one's self and a low concern for satisfying the concerns of the person they are experiencing conflict with. Thus the dominating style of conflict resolution is consistent with individualistic cultures. The use of the dominating style should have been used more from the sample in this study. Even in comparison to Rahim's (1992) study the dominating style of conflict resolution was substantially used less in this study. Perhaps
this particular sample was socially biased against stating their preference for a dominating style of conflict resolution.

Furthermore, the avoiding style of conflict resolution was the third most used style of resolving conflict, which is again consistent with a collectivist culture. Rahim (1992) asserted that an avoiding style of conflict resolution is consistent with a collectivist culture, because it reflects the preference to have both parties satisfied. This study found that the avoiding and compromising styles rated higher than both the obliging and dominating styles.

A reason why the findings of this study did not match Hui's (1988, cited in Myers, 1996) individualism - collectivism theory could be that this study was investigating conflict resolutions style in an organisation/work context. The individualism - collectivism theory pertains to how people in cultures deal with the conflict that they face in wider contexts. In an organisational/work context the behavioural dynamics are different from what can be expected outside work hours. The conceptual contingency model specifies that dyad relationships in a work context are bound by power and authority dimensions, which in turn influences conflict resolution strategies. These power and authority dimensions may not be as prevalent outside work settings as they are inside work settings. The sample used for this study may have shown different behavioural tendencies relating to interpersonal conflict outside an organisational/work context.

Consistent with previous research on the gender differences in conflict resolution styles (Gayle, Preiss & Allen, 1994, cited in Munduate, et al, 1999; Sorenson, Hawkins & Sorenson, 1995, cited in Munduate, et al 1999) this study found no significant difference in the way men and women chose to resolve interpersonal conflict. However this study did find that there were gender differences for the way men and women chose to deal with conflict when the intensity of the conflict was included in the interaction. This issue will be raised later in the discussion.

The interaction of conflict resolution styles and functional relationship yielded data that is congruent with previous research. Perrealt and Miles 91978, cited in Drory & Ritov, 1997) asserted that the choice of a conflict resolution style in an organisation was determined by the dimensions of power, authority and control. This study's findings
emulate Rahim's (1992) finding that the use of a dominating style of conflict resolution was most prevalent when dealing with a subordinate. Also consistent with Rahim's (1992) finding was that avoiding and obliging styles of conflict resolution were least common with a subordinate.

Given Driry and Ritov's (1997) theory of the 'conceptual contingency model' based around the supervisor - subordinate relationship, it is not surprising that an aggressive style of conflict resolution was most prevalent when attempting to resolve conflict with a subordinate. Subordinates attempt to resolve conflict in low risk strategies with superiors, because they realise that their place and future in an organisation may depend on their relationship with their supervisors. Therefore it was not expected that an aggressive style of conflict resolution would feature highly. The finding that the aggressive style of conflict resolution was the least used style meet prior expectations. Bergmann and Volkema (1996) stated that in dealing with conflict people tend to use a series of different styles to resolve the conflict and then lastly resort to an extreme style to resolve the conflict. It is asserted that an aggressive style of conflict resolution is an extreme style, and thus the reasons why its prevalence was less than for the five other conflict resolution styles.

In discussing the aggression questions used for this study it can be seen that the high level of reliability between test items demonstrates a high level of internal consistency. Anastasi (1988) asserts that psychological tests can be validated by the method of internal consistency. This involves the correlation of sub-test scores with the total score. Anastasi (1988) states that in the construction of tests, the scores on each sub-test are correlated with the total score and any sub-test whose correlation with the total score is too low is eliminated from the test. The remaining sub-tests are then reported as evidence of internal consistency of the whole instrument. This test of internal consistency suggests homogeneity between questions. Anastasi (1988) suggests that the degree of homogeneity of a test is relevant to construct validity. However, the contribution of the internal consistency test to the overall test validity is limited. The internal consistency test does not pertain to what the test actually measures.

What aggression questions are not tested for are whether they have a high degree of construct related validity. It was not possible to correlate the aggression questions to a
recognised aggression test due the format and design of the questions. However, this test does have a high degree of face validity and the high degree of internal consistency demonstrates that the questions are measuring the same construct. Furthermore, in designing the aggression questions, content validity was considered in the fact that both overt and covert question were used to cover a representative sample of aggression.

4.2.4 Levels of Interpersonal Conflict and Styles of Conflict Resolution

A core research question being investigated in this study was whether conflict resolution styles vary as the level (intensity) of conflict increases. Previous studies by Bergmann and Volkema (1996) had indicated that people do use a preferred style of handling conflict and then use a secondary style and lastly used an extreme style or back up style as a last resort. However no previous study had formed the intensity of interpersonal conflict into a standardised measure. The findings of this study do suggest that people vary their conflict resolution strategies as the intensity of the conflict increases. This finding supports Thomas (1992) and Glasl's (1982) assertion that as the situation surrounding the conflict varies, it will significantly influence an individuals choice of style of conflict resolution.

In looking at the general trend of how males and females tend to resolve conflict a pattern has emerged. At conflict level one males and females use a predominately integrating style, compared to the other styles. This is congruent with the overall findings that an integrating style of conflict resolution was the most prevalent style, regardless of levels of intensity. However for males the use of the integrating style decreases as the intensity increases and at level four the obliging style becomes the most prevalent. For females this trend is different. For females the use of the integrating style still remains the most prevalent as the intensity of the conflict moves from levels one to four. As the intensity of the conflict increases both genders tended to resolve the conflict in a non-confrontation style. This is evident by the increase in use of the avoiding and obliging styles. In the use of dominating and aggressive styles males tended to have a higher use at a high level of intensity compared to females.
From the results it is clear that gender certainly played a moderating variable in the interaction between conflict resolution styles and the intensity of the conflict. In explaining this difference the theories of Martin and Bergmann (1996) can be used for elucidation. As the level of conflict increased from level one to level three the use of the aggressive style of conflict resolution remains the same. However when the conflict level reaches level four the behavioural dynamics in the dyad relationship change. When faced with an increasingly intense conflict situation males, because of the social role theory, assert themselves in an aggressive manner to protect their male image. The findings of this study also partially support Seth's (1994) theory that the male culture is overtly more competitive and aggressive. This statement needs clarifying from an earlier statement made about the male culture. Males and females experienced the same amount of interpersonal conflict in this study. However, when men interacted with other men they experienced more interpersonal conflict and tended to use the dominating and aggressive styles of conflict resolution more.

4.3 Limitations

A limitation of this study is that it is a cross-sectional study of how participants responded to one particular incident of conflict. This study asks participants to rate how they attempted to eliminate or reduce the conflict that they experienced at a certain level of intensity (at its peak). What this study does not look at is how individual participants attempted to eliminate or reduce the same conflict incident at different levels of intensity. This study used individual responses to different levels of conflict to describe how people in general used the six conflict resolution styles at the different levels of intensity. Thus, this study may lack external validity, because it generalises how people use conflict resolution styles.

A limitation of this study can be found in the data collection. While it is plausible to assume that all participants in this study have both a supervisor and peer, not all participants may have had subordinates. Thus, the subordinate data may give false readings. This is because not all of the people, who stated that they had not experienced conflict with a subordinate may have actually had one.
The sample is small and located in regional province, which may limit drawing wider conclusions. It is possible that a more representative sample of employees across contrasting occupations from both private and public sectors may yield different findings with respect to the prevalence of interpersonal conflict.

The study's data is based on participants' perceptions of the conflict incident and information was gathered after the conflict incident had happened. Participants memory recall may have been erroneous. Furthermore, the data from this study was derived from retrospective self-reports. Self-reported ways of dealing with conflict might not actually reflect actual behaviours, but rather behaviour intentions.

4.4 Future Research

For future research it is suggested that this study be replicated with a more substantial and representative sample of employees. Future research should use participants across contrasting occupations from both private and public sectors and from different cultures. This would enhance the understanding of interpersonal conflict in the workplace. A larger and more representative sample would be able to better gauge the prevalence of interpersonal conflict in the workplace. Although this study tried to ensure that participants' focus on one particular incident of interpersonal conflict, it may be valuable for future research to test and retest participant response to check for validity and reliability.

In order to better understand the conflict escalation process researchers should tap into the reasons why the conflict occurred and how people resolve the conflict, not just the responses from this study. Data collected through questionnaires do not provide enough information to base a sound judgement of diagnosis. In-depth interviews with the conflicting parties are needed to gain a better understanding of the nature of conflict. For future research, it may be reasonable to design laboratory and/or field experiments, so that participants can be interviewed after a conflict incident so that the reasons behind their behaviours can be better and more understood.
Substantial and extensive research into the prevalence of interpersonal conflict in the workplace in terms of the different levels of intensity could provide national norms. The postulation that interpersonal conflict in the workplace can actually be functional to organisations was stated earlier. It is just a question of determining the right amount of interpersonal conflict to stimulate organisational growth and other related beneficial factors. The establishment of national norms would enable organisations to assess the prevalence of interpersonal conflict in their workplace and enable them to decide whether their organisation has too little or too much of a particular type of conflict.

Lastly, for future research, it suggested that a longitudinal study be conducted to analyse interpersonal conflict in the workplace. Some people may have been experiencing interpersonal conflict for many months with both the intensity and style of conflict resolution used differing. A longitudinal study of such people would tap in the behavioural dynamics of these conflict relationships and assess how people attempt to eliminate and reduce the interpersonal conflict that they experience.

4.5 Conclusion

In conclusion, this study developed an escalation model on interpersonal conflict in the workplace and used it to research the prevalence of interpersonal conflict in the workplace and its interaction with conflict resolution styles. The results of this study identified that there is a high level of interpersonal conflict in the workplace and that this prevalence decreased as the intensity of the interpersonal conflict increased. Furthermore, the findings suggested that peoples' use of conflict resolution strategies do vary as the intensity of the conflict increases. Lastly, the prevalence of conflict resolution styles in study did not match previous research findings relating to cultural differences in dealing with interpersonal conflict. The implications of this study are that extensive research should be conducted on the escalation model of interpersonal conflict in the workplace. This would establish national norms allowing organisations to use these to determine whether their organisation has too little or too much interpersonal conflict.
REFERENCES


APPENDIX A
Work Conflict Questionnaire

**PLEASE READ INSTRUCTIONS CAREFULLY. FAILURE TO READ AND FOLLOW THEM ACCURATELY MAY LEAD TO INCORRECT RESULTS**

This questionnaire relates to people you have experienced conflict with in the workplace. This person may be your supervisor, co-worker or someone under your authority etc. This questionnaire does not relate to people that you have experienced conflict with outside your workplace e.g. partner, friends, relatives, associates etc.

**Question 1:** What is your age: ______

**Question 2:** What is your sex: Male / Female

The following are definitions of conflict between people at work and at different levels of intensity. These definitions will be used in relation to the questions that follow.

**Level 1:** A minor disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which resulted in some feelings of minor uneasiness and discomfort that may lead you to avoiding the person or persons, talking to a friend or peer about the problem and/or talking to the conflict person or persons about the disagreement or controversy.

**Level 2:** A moderate disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which results in feelings of dislike to the person or persons, feelings of moderate uneasiness and discomfort that may lead to wanting to avoid the person or persons, a moderate argument or taking the problem to a higher source.

**Level 3:** A serious disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work which resulted in strong feelings of dislike and anger to the person or persons. This may lead to either strong verbal arguments, threats, feelings of wanting to leave the job, serious avoidance of the person or persons, crying or asking for a transfer.
Level 4: A very serious disagreement or controversy in interests, beliefs, values, goals or ideas between you and another person or persons at work, which has resulted in feelings of intense anger, frustration and hatred that either leads to outbursts of verbal and/or physical abuse and/or sabotaging the person or persons work and/or leaving your job.

Question 3: Please look at the different levels of conflict and answer Yes or No in the appropriate boxes.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever experienced level 1 conflict with a male and/or female at work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you ever experienced level 2 conflict with a male and/or female at work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Have you ever experienced level 3 conflict with a male and/or female at work?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you ever experienced level 4 conflict with a male and/or female at work?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 4: Please look at the different levels of conflict and answer Yes or No in the appropriate boxes.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>LEVELS OF CONFLICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever experienced conflict with a supervisor/manager at work?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Have you ever experienced conflict with a co-worker/peer at work?</td>
<td></td>
</tr>
<tr>
<td>3. Have you ever experienced conflict with a person under your authority at work?</td>
<td></td>
</tr>
</tbody>
</table>
Please think of your most recent experience of conflict with another person at work and answer the following questions (Please circle the correct answer).

**Question 5:** Was this person a male or female?

**Question 6:** Was this person your? 1. Supervisor/Manager  
2. Peer/Co-worker  
3. Someone under your authority  
4. Other (Please specify) __________

**Question 7:** At what level of conflict did it reach at its peak? 1 2 3 4

**Question 8:** Have you had previous conflict with this person? Yes / No

**Question 9:** Was this previous conflict resolved? Yes / No / N/A

**Question 10:** How long ago did this conflict occur? 1. In the last 6 months  
2. 6 to 12 months  
3. 1 to 2 years  
4. Over 2 years ago

Please answer the following series of questions in relation to the person you had conflict with in questions five to ten. Answer these questions thinking of how you dealt with the conflict at the time and when it was at its highest level of conflict e.g. Level 1, 2, 3 or 4. Please do not answer these questions thinking of how you would deal with the conflict now, but only how you dealt with the conflict at the time.

The following is a scale to be used for the following set of questions:

**Response 1** = indicates that you are least likely to choose this style to resolve the conflict.

**Response 2** = indicates that you are unlikely to choose this style to resolve the conflict

**Response 3** = indicates that you are neither likely nor unlikely to choose this style to resolve the conflict

**Response 4** = indicates that you are likely to choose this style to resolve the conflict

**Response 5** = indicates that you are most likely to choose this style to resolve the conflict.
Please circle the response that you think most applies to you.

- Work Colleague = The person you are having the conflict with.

"A higher number represents a greater use of the conflict style"

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I try to investigate the issue with my work colleague to find</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>a solution acceptable to us.</td>
<td></td>
</tr>
<tr>
<td>2. I generally try to satisfy the needs of my work colleague.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. I attempt to avoid being put on the spot and try to keep the</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>conflict with my work colleague to myself.</td>
<td></td>
</tr>
<tr>
<td>4. I try to integrate my ideas with those of my work colleague</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>to come with a decision jointly.</td>
<td></td>
</tr>
<tr>
<td>5. I have attempted to and/or have sabotaged my work</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>colleague's work when I can't get my own way.</td>
<td></td>
</tr>
<tr>
<td>6. I give some to get some.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. I try to work with my work colleague to find solutions to a problem,</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>which satisfy our expectations.</td>
<td></td>
</tr>
<tr>
<td>8. I usually avoid open discussion of my differences with my work</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>colleague</td>
<td></td>
</tr>
<tr>
<td>9. I throw objects at my work colleague when I get into a conflict</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>situation.</td>
<td></td>
</tr>
<tr>
<td>10. I usually hold on to my solutions to a problem.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. I try to find a middle course to resolve the conflict which has</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>reached a stalemate.</td>
<td></td>
</tr>
<tr>
<td>12. I generally avoid an argument with my work colleague.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. I use my authority to make a decision in my favour.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. I usually accommodate the wishes of my work colleague.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. I have pushed, struck or punched my work colleague when we have got</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>into a conflict situation.</td>
<td></td>
</tr>
<tr>
<td>16. I give into the wishes of my work colleague.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. I win some and I lose some.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Response 1 = indicates that you are least likely to choose this style to resolve the conflict.
Response 2 = indicates that you are unlikely to choose this style to resolve the conflict
Response 3 = indicates that you are neither likely nor unlikely to choose this style to resolve the conflict
Response 4 = indicates that you are likely to choose this style to resolve the conflict
Response 5 = indicates that you are most likely to choose this style to resolve the conflict.

Answer how you dealt with the conflict at the time and at its highest level.

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. I somehow try to get even my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I exchange accurate information with my work colleague to solve a problem together.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I sometimes help my work colleague to make a decision in his/her favour.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I usually allow concessions to my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I argue my case with my work colleague to show the merits of my position.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I try to play down our differences to reach a compromise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I usually shout at my work colleague when we get into conflict situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I usually propose a middle ground for breaking deadlocks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I negotiate with my work colleague so that a compromise can be reached.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I try to stay away from disagreements with my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I avoid an encounter with my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I use my expertise to make a decision in my favour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I often go along with the suggestions of my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I use 'give and take' so that a compromise can be made.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. I am generally firm in pursuing my side of the issue.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. I collaborate with my work colleague to come up with decisions acceptable to us.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Response 1** = indicates that you are least likely to choose this style to resolve the conflict.

**Response 2** = indicates that you are unlikely to choose this style to resolve the conflict.

**Response 3** = indicates that you are neither likely nor unlikely to choose this style to resolve the conflict.

**Response 4** = indicates that you are likely to choose this style to resolve the conflict.

**Response 5** = indicates that you are most likely to choose this style to resolve the conflict.

**Answer how you dealt with the conflict at the time and at its highest level.**

<table>
<thead>
<tr>
<th>Response</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>35. I have vigorously tried to get my work colleague to leave their job or company.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. I try to satisfy the expectations of my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. I sometimes use my power to win a competitive situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. I try to keep my disagreement with my work colleague to myself in order to avoid hard feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I try to avoid unpleasant exchanges with my work colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. I use my influence to get my ideas accepted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. I try to work with my work colleague for a proper understanding of a problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B
Information Sheet For Participants

Hello, my name is Scott Doolan and I am completing a Master of Arts degree at Massey University. My supervisor is associate professor Doug Paton who is based at the School of Psychology at Massey University. The Massey University Ethics Committee has approved this research project. This study is being funded by the Graduate Research Fund.

The aim of this study is to gain a better understanding of conflict between people in the workplace (e.g. how often it occurs and how individual people resolve conflict they experience), to explore any differences in how male and females deal with conflict, and to explore any differences in how people in different work positions deal with conflict.

Over the last few decades conflict between people is becoming increasingly common within a complex work environment (Johnson & Indyik, 1996). With this increase in conflict between people have come a number of negative factors. Conflict between people is highly stress related and is related to a number of psychological, physical and behavioural symptoms. Because of the negative effects associated with conflict between people in the workplace, it is a realistic and worth while issue to study. To date there has been no research in New Zealand conducted on this topic.

Your organisation has given permission for the questionnaire to be distributed. You are invited to participate in this study.

Your participation in this study will involve you completing the attached questionnaire and mailing it to the School of Psychology in the prepaid envelope provided.

Completing this questionnaire will take around 20 minutes. Completing and returning the questionnaire implies you have consented to participate in this study.

Your rights as a participant:

- Participation in the study is voluntary and you may wish to decline to participate.
- You may refuse to answer any particular questions.
• You will be given the opportunity to receive a copy of the findings of this study once it is concluded.

All information gathered from this study will be treated in the strictest confidence. Only myself and my supervisor will have access to the data gathered from this study and in no way will your organisation's management have access to your questionnaire or have access to individual participant's answers. The findings of this study will be used for the completion of a thesis project and for possible publication.

If you feel that this study has raised some issues (conflict with a co-worker) that you feel uncomfortable with and/or that you feel that you would like to talk to someone about these issues, then you can contact the Psychology Clinic (Ph. 06 350 5196), who will advise an appropriate support resource in addition to those available within your organisation.

Please feel free to contact me if you have any questions or queries regarding this study. You can leave a message for me at the School of Psychology (Ph 06 350 4118) or alternatively you can contact my supervisor Doug Paton (Ph 06 350 5799 Ext. 2064).

**Returning this questionnaire applies your informed consent**

Thank you for your time

Scott Doolan
Appendix C
Dear Sir/Madam,

My name is Scott Doolan and I am completing a Master of Arts Degree at Massey University. As part of my Masters of Arts Degree I have to complete a thesis, which is a major research project. I am specialising in Industrial/Organisational Psychology in which my thesis topic will be aligned to this area of Psychology.

The aim of my thesis study is to research inter-personal conflict in the workplace, its prevalence, how individual people resolve inter-personal conflict, to explore any gender or functional relationship affects and to study inter-personal conflict in the workplace as an escalation process rather than a single definition.

Over the last few decades inter-personal conflict has become increasingly common within a complex work environment. With this increase in inter-personal conflict have come a number of negative factors. Inter-personal conflict is highly stress related and is related to a number of psychological, physical and behavioural symptoms. Because of the negative effects associated with inter-personal conflict in the workplace, it is a realistic and viable issue to study. To date there has been no research in New Zealand conducted on this topic.

Because of the negative effects associated with inter-personal conflict in the workplace it is an important issue to study, with respect to safeguarding the physical and mental wellbeing of employees and for maintaining organisational performance. Therefore it would be beneficial for Industrial/Organisational Psychologists in New Zealand to acquire this information for possible aggression management training for managers and supervisors.

My Project title is:

The prevalence of interpersonal conflict in the workplace and its relationship to gender, functional position and style of conflict resolution.

I am looking for a number of organisations to conduct my thesis in and would greatly appreciate the opportunity to meet with you and discuss the possibility of conducting my thesis in your organisation.

In any research that involves humans there are certain ethical guidelines that must be followed. The Massey University Ethics Committee has approved this research project. Attached to this letter is an information form that all participants would receive before filling in the questionnaire. This information sheet specifies the participants' rights.

All information gathered from this study would be treated in the strictest confidence to both the organisation and participants. Only the researcher and his supervisor would have access to the data gathered from this study, and organisation & participant anonymity.
would be assured. The findings of this study will be used for the completion of a thesis project and for possible publication.

My supervisor is associate professor Doug Paton who is based at the School of Psychology at Massey University. This study is being funded by the Graduate Research Fund.

I would welcome the opportunity to discuss my thesis project with you. I can be contacted at the above number and address or alternatively you can contact my supervisor Doug Paton (Ph 06 350 5799 ext. 2064).

Yours Sincerely,

Scott Doolan
Appendix D
Factor structure matrix for varimax rotated factor solution (Rahim, 1983)

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>STYLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I try to investigate an issue with my _____ to find a solution acceptable to us</td>
<td>.53 .02 -.05 .01 .09</td>
</tr>
<tr>
<td>4. I try to integrate my ideas with those of my _____ to come with a decision jointly</td>
<td>.55 .02 -.08 .04 .20</td>
</tr>
<tr>
<td>6. I try to work with my _____ to find solutions to a problem which satisfy our expectations</td>
<td>.56 .01 -.07 .08 .07</td>
</tr>
<tr>
<td>15. I exchange accurate information with my _____ to solve a problem together</td>
<td>.61 -.07 -.01 .10 .01</td>
</tr>
<tr>
<td>28. I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way</td>
<td>.58 -.12 .00 -.06 .01</td>
</tr>
<tr>
<td>29. I collaborate with my _____ to come up with decisions acceptable to us</td>
<td>.49 -.05 .04 .14 .11</td>
</tr>
<tr>
<td>35. I try to work with my _____ for a proper understanding of a problem</td>
<td>.60 -.02 -.01 .03 .03</td>
</tr>
<tr>
<td>3. I attempt to avoid being put on the spot and try to keep conflict with _____ to myself</td>
<td>.05 .60 .06 .07 .12</td>
</tr>
<tr>
<td>7. I usually avoid open discussion of my differences with my _____</td>
<td>-.09 .58 .04 .03 .03</td>
</tr>
<tr>
<td>22. I try to stay away from disagreement with my _____</td>
<td>-.13 .53 -.00 .22 .09</td>
</tr>
<tr>
<td>23. I avoid an encounter with my _____</td>
<td>-.21 .48 -.03 .25 .08</td>
</tr>
<tr>
<td>32. I try to keep my disagreement with my _____ to myself in order to avoid hard feelings</td>
<td>-.05 .61 .04 .12 .03</td>
</tr>
<tr>
<td>33. I try to avoid unpleasant exchanges with my _____</td>
<td>.10 .42 .00 .16 .06</td>
</tr>
<tr>
<td>34. I generally avoid an argument with my _____</td>
<td>.02 .36 -.11 .16 .08</td>
</tr>
<tr>
<td>8. I usually hold on to my solutions to a problem</td>
<td>-.15 .13 .32 .02 -.02</td>
</tr>
<tr>
<td>10. I use my influence to get my ideas accepted</td>
<td>.00 -.03 .64 .06 .11</td>
</tr>
<tr>
<td>11. I use my authority to make a decision in my favour</td>
<td>.12 .01 .69 .01 .02</td>
</tr>
<tr>
<td>18. I argue my case with my _____ to show the merits of my position</td>
<td>.07 -.06 .33 .06 .04</td>
</tr>
<tr>
<td>24. I use my expertise to make a decision in my favour</td>
<td>.00 .04 .54 .11 .01</td>
</tr>
<tr>
<td>27. I am generally firm in pursuing my side of the issue</td>
<td>.12 -.06 .44 -.02 -.03</td>
</tr>
<tr>
<td>31. I sometimes use my power to win a competitive situation</td>
<td>-.03 -.03 .64 -.02 .02</td>
</tr>
<tr>
<td>2. I generally try to satisfy the needs of my _____</td>
<td>.19 .12 -.03 .48 .08</td>
</tr>
<tr>
<td>12. I usually accommodate the wishes of my _____</td>
<td>-.02 .11 .11 .68 .18</td>
</tr>
<tr>
<td>13. I give into the wished of my _____</td>
<td>-.13 .26 .06 .59 .09</td>
</tr>
</tbody>
</table>
16. I sometimes help my _____ to make a decision in his/her favour.  | 27 | .02 | .21 | 27 | -.01
17. I usually allow concessions to my _____  | .02 | .11 | .07 | .42 | .14
25. I often go along with the suggestions of my _____  | .14 | -.03 | -.02 | .42 | -.03
30. I try to satisfy the expectations of my _____  | .14 | .06 | .07 | .57 | .02
5. I give some to get some _____  | .11 | .02 | .04 | .07 | .31
19. I try to find a middle course to resolve an impasse  | .06 | .14 | .02 | .16 | .59
14. I win some and I lose some  | .03 | -.01 | .09 | .13 | .18
19. I try to play down our differences to reach a compromise  | .08 | .22 | .06 | .08 | .39
20. I usually propose a middle ground for breaking deadlocks  | .07 | .07 | .00 | .06 | .82
21. I negotiate with my _____ so that a compromise can be reached  | .14 | -.03 | .07 | .03 | .49
26. I use give and take so that a compromise can be made  | .14 | -.04 | .00 | .09 | .50

| Eigenvalue        | 4.10 | 3.90 | 2.26 | 1.52 | 1.09
| Percent of variance explained | 30.5 | 22.4 | 16.9 | 11.4 | 8.2
| Cumulative        | 30.5 | 52.9 | 69.8 | 81.2 | 89.3 |