"REGRETS? I've Had A Few, But Then Again...": Towards A Psychology Of Regret.

A thesis presented in partial fulfilment of the requirements for the degree of
Master of Science in Psychology
At Massey University,
Palmerston North, New Zealand.

David John Bloore

2003

ABSTRACT

The aim of the present study was to investigate the experience of regret and how regret affects people's lives. A convenience sample of 101 adult volunteers (mean age 32.5) completed a questionnaire, which measured the content of regret, the emotional profiles of action and inaction regret, the temporal pattern of regret and the relationship between regret and life satisfaction. Results showed that personal responsibility was an important aspect of most regret experiences. Contrary to the hypothesis and previous research, there was no difference in the number of action and inaction regrets reported by the participants. Previous research claims regrets of inaction are more frequent and more significant than regrets of action. As predicted, action regrets were experienced more recently than inaction regrets, thus providing indirect evidence for the 'temporal pattern' theory of regret. However, other results indicated that action and inaction regrets have different emotional profiles and that characteristic differences may cause this 'temporal pattern'. It is recommended that a longitudinal study be conducted in this area of regret research. The main content areas of the participants' regrets were for intimate relationships, family, education and health/self-care, as found in previous research. Some content differences were found for action/inaction and gender; there were no age differences however. Consistent with the hypotheses, the number of regrets, the intensity of regrets, the frequency of regret thought and the impact of regret were all negatively correlated with life-satisfaction. Participants whose regrets had a positive impact were also more satisfied with their lives. Thus, the present research suggests that regret can have a constructive function. Based on these findings, a number of suggestions are outlined to help minimise the negative effects of regret. These include, accepting one's past mistakes, using past regrets as learning experiences and minimising the amount of time spent thinking about regret.

ACKNOWLEDGEMENTS

First and foremost I would like to thank my supervisor, Dr Ross Flett. Your encouragement, direction and good humour have been greatly appreciated throughout the completion of this thesis.

I would also like to thank my good friend, and associate for part of this project, Simon Ashby. Your voluntary assistance made the analysis of results both efficient and enjoyable.

Furthermore I would like to express my gratitude to everyone who helped distribute the questionnaire. The generous giving of your time assisted me greatly and helped to obtain a diverse sample of participants.

To all the people who gave up their time to participate in this study, I am greatly appreciative. Without your willingness to write about your regret experiences, this project could not have been completed.

Finally, I would like to thank my friends and family who have motivated and supported me throughout the year. Your continued interest in this project (and in me) has been wonderful.

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES

CHAPTER ONE
An Introduction to Regret

At some point in our lives, most of us will have experienced a feeling of regret. It may have been for an opportunity missed, a reckless act or a relationship problem. Even the most trivial choices we make, such as choosing the cash register queue that ends up being the slowest, can leave us with feelings of regret (Zeelenberg, 1999). Although some people deny having any regrets about their past, it is difficult to imagine living a life without wishing one had made some decisions differently. In a study that looked at the verbal expression of emotion, regret was the second most frequently named emotion, only after love (Shimanoff, 1984). Regret is clearly a common experience in our society.

The earliest research about regret originated from a philosophical background and attempted to discover the properties of regret and how they differed from similar emotional states such as guilt, disappointment, remorse and sadness (Gilovich & Medvec, 1995). Regret is a broad concept, which incorporates cognitive as well as emotional aspects (Landman, 1987b).

1.1 Cognitive Aspects of Regret

Regret is more than just an 'emotional feeling' and includes cognitive processes such as memory, reflection, decision-making and critical judgement (Landman, 1987b). A situation, in which someone may experience regret, requires him or her to think about what has happened and make a judgment based on this information. After weighing up the situation a person will be able to say whether he or she regrets the situation or not. If the result is considered to be less than satisfactory, regret may be experienced. If the result is satisfactory, then it is unlikely to be experienced. Similar emotions such as disappointment or sadness do not require this level of cognitive processing and are better described as 'gut-reactions' (Gilovich & Medvec, 1995). Although regret is associated with mental processes, it cannot be confined simply to a cognitive label, as it can also evoke strong feelings of emotion.

1.2 Emotional Aspects of Regret

Anyone who has experienced regret knows that it is typically accompanied by negative feelings such as longing, sorrow, remorse and sadness. Landman (1987b, p143) states, "One reason for the undeniably emotional nature of regret is its frequent association with self-relevant reflection." Also Zeelenberg (1999, p.327) reports the following characteristics that make up the phenomenology of regret:

> [Regret] is accompanied by feelings that one should have known better and by having a sinking feeling, by thoughts about the mistake one has made and the opportunities lost, by feeling a tendency to kick oneself and to correct one's mistake, and wanting to undo the event and to get a second chance.

So although a cognitive decision is made on a situation, the end result can evoke various feelings (usually negative), depending on a person's emotional state. There is agreement on the cognitive-emotive interdependent relationship of regret (e.g. Landman, 1987b; Landman 1993; Gilovich & Medvec, 1995). However, some definitional issues remain unresolved.

1.3 Defining Regret

Although defining regret might seem a simple task at first (especially when considering how often the word is used in everyday language), identifying characteristics that are unique to regret and which distinguish it from other emotions such as disappointment or sadness is difficult. As a result of disagreement in the field of psychology on how regret should be defined, there are many different definitions of regret.

Early Definitions

The early economic approach to regret research defines the term very narrowly as: "The difference in value between the assets actually received and the highest level of assets produced by *other* alternatives" (Bell 1982, p.963). Regret only occurs as a reaction to a comparison between a chosen outcome and a rejected outcome. Although the outcome of an experience is an important determinant of regret, this definition leaves no room for *imagined* consequences, which can also lead to feelings of regret.

Counterfactual thinking occurs when people dwell on past events and *imagine* what might have been had a different course of action taken place (Roese, 1997). Research in this area has shown that regretted events do not merely occur in isolation, but often involve, and are created by, comparisons with other imagined 'possible outcomes' (Roese 1997). Thus, although the outcome of an event is important, the decisional path that leads to the outcome seems equally as important. With this in mind, Landman (1987b, p153) has provided a very broad definition of regret:

> Regret is a more or less painful cognitive/affective state of feeling sorry for losses, transgressions, shortcomings, or mistakes. The regretted matters may have been sins of commission as well as sins of omission; they may have been actually executed deeds or entirely mental ones; they may have been committed by oneself or by another person or group; they may be moral or legal transgressions or morally and legally neutral; and the regretted matters may have occurred in the past, the present or the future.

However as Connolly, Ordonez and Coughlan (1997) point out, this definition is so broad and vague that it doesn't even distinguish regret and could be used to describe other emotions, such as sadness or guilt.

Regret and Personal Responsibility

A major discrepancy between researchers concerning the definition of regret involves the relationship between regret and personal responsibility for the perceived outcome. Although there seems to be overall agreement that there is a positive correlation between personal responsibility and regret, opinions differ as to whether responsibility is a *necessary* condition for regret (Zeelenberg, van Dijk & Manstead, 1998).

One side of this argument is that people can in fact experience regret for matters where responsibility lies not with themselves but with someone else. Landman (1993) argues that regret matters for which one is personally responsible may prove more intense, but that regret can include matters for which one is or is not personally responsible (such as regretting a decision that a friend made). This is inherent in the

definition of Simonson (1992 p117, cited in Connolly, Ordonez & Coughlan, 1997): "Regret represents the sorrow over something done or not done, regardless of whether the decision-maker was responsible for the outcome or not..." Other researchers agree with this idea that personal responsibility does increase the likelihood of regret, but is not a *necessary* precondition for it (Connolly, Ordonez & Coughlan 1997). For example, Ordonez & Connolly (2000) found that students expressed regret for a bad outcome even when they were not directly responsible for this outcome.

The other argument however, is that personal responsibility is the *determining* factor of regret and something that distinguishes it from other similar emotional states (Zeelenberg van Dijk & Manstead, 1998; Zeelenberg, van Dijk & Manstead, 2000; van Dijk, van der Plight & Zeelenberg, 1999). In a review of Landman's (1993) book, Farrell (1997, p.399) states that:

> ...All we can properly *regret* are our past actions and decisions; the other 'regrettable' things [Landman] mentions, one might say, are strictly speaking, things whose occurrence we might *lament*, perhaps, or otherwise wish had not occurred, but not things we can intelligibly be said to *regret* in the same sense as that in which we can be said to regret things we have intentionally *done*.

Gilovich and Medvec (1994) noticed that when they asked participants to describe their biggest regrets, over 200 of the 213 regrets reported involved circumstances in which the respondent was personally responsible. This indicates (as was found by the authors) that people perceive their actual regrets to be their own responsibility. Zeelenberg, van Dijk and Manstead (2000) also make the comment that even in situations where it may seem impossible for a person to have any control over an outcome, they may experience feelings of control anyway, therefore feeling some responsibility for the outcome.

Personal responsibility is arguably the driving force behind the experience of regret and the intensity level to which it is felt. Although it may be possible to feel regret in

the absence of personal responsibility this is more the exception rather than the rule (Zeelenberg van Dijk & Manstead, 2000).

Regret for Repeated Decisions

Another discrepancy concerning the definition of regret is whether someone can "feel regret" for *future events*. Some researchers argue that regret can only be used to describe feelings associated with events that a person would not want to repeat in the future. They assert that any negative feelings associated with repeated or future events needs to have another definition, such as guilt or anxiety (e.g. Hampshire 1960, cited in Gilovich & Medvec 1995). Others refute this claim, however, and say that feelings of regret *can* be experienced about the same repeated mistake or ongoing event (Landman, 1993). For example, a cigarette smoker may regret their bad habit, but know full well they will continue to smoke.

As these findings indicate, there are still unresolved issues surrounding the definition of regret. Therefore in the present study, the researchers will not be using a specific definition of regret. Instead the data collected from this study will be used to help contribute to the definition of people's regret experiences. A similar method to Gilovich and Medvec's (1994) study will be used, where participants are asked to write down regrets they have actually experienced. These regrets will then be considered to see whether people are personally responsible for their regrets, and whether some of the regrets are for repeated actions.

1.4 The Different Methods of Research

Experimental Methods

Some studies employ 'regret scenario' methods in experimental settings. These experiments usually involve the participants of the study reading a hypothetical vignette and then making a decision as to how much regret a character in the vignette would experience. The participants choice for these hypothetical characters are then generalised to their real life regret experiences, i.e. their choice in the hypothetical scenario is assumed to reflect how they would experience regret personally in their everyday life (see Kahneman & Tversky 1982a; Landman, 1987a; Zeelenberg van Dijk & Manstead, 1998; van Dijk, van der Plight & Zeelenberg, 1999; Byrne & McEleney, 2000). Although these and many other studies like them have helped

gain some knowledge into how people perceive regret based on different outcomes, the regret reported in these 'controlled experiments' is likely to be qualitatively different to the regret experienced in real life (Feldman, Miyamoto & Loftus, 1999).

Descriptive Methods

Other researchers point out that these experimental studies are too simplistic and exclude other influences that often affect whether someone will regret a decision or not (Feldman, Miyamoto & Loftus, 1999). Therefore they conduct their methods of research by *directly* asking participants about their own regret experiences (e.g. Gilovich & Medvec, 1994; DeGenova, 1992; Hattiangadi, Medvec & Gilovich, 1995). Thus the data collected includes different aspects of people's actual regrets and does not need to be inferred from simple regret-based vignettes. Vignette experiments may be useful for looking at some general aspects of regret, (e.g. how people regret decisions based on limited factors) but the findings from these studies should not be used as a generalisation for people's real regret experiences. For this kind of specific data about the experience of regret, people should be asked directly about their own specific regret experiences.

The present study is one that looks specifically at regret experiences. Based on the views of researchers in the previous section (such as Feldman, Miyamoto & Loftus, 1999, Gilovich & Medvec, 1995 etc.) descriptive methods of data collection make fewer assumptions about people's regrets than experimental methods do. Therefore asking people directly about their specific regret experiences seems to be a more accurate way to study regret. With these considerations in mind, the present study will also be conducting a descriptive method of data collection that directly asks participants about their own regret experiences.

Having introduced the concept of regret and outlined some of the issues surrounding its definition and methods of research, the focus will now move to specific areas of regret research. The next chapter will outline the current main areas of research on regret that are relevant to the present study.

CHAPTER TWO

Research on Regret

Most of the early psychological studies that focused on regret, looked at *anticipated* regret and how this affected a person's current choices (e.g. Bell, 1981; Loomes & Sugden, 1982, both cited in Gilovich & Medvec 1994). These early theories sought to frame regret within an economic decision-making model. This model stated "…The expected utility of choice X (the alternative chosen) is a mathematical function of the probability of X times the value of X minus the amount of regret for not-X (the better alternative not chosen)" (Landman, 1987b, p139). These early models reduced regret to a simple cognitive decision, while the emotional determinants and experience of regret were largely ignored. Research in the area of counterfactual thinking, (such as the often-cited study by Kahneman & Tversky, 1982a), began to generate interest in what we regret, why we regret, and how we can reduce feelings of regret (Gilovich & Medvec, 1994). Since this time, numerous studies have looked at people's regret experiences and what affect these regrets can have on their lives.

The overall aim of this study is to understand the concept of regret more clearly, in an effort to help people minimise the frequency and negative intensity of regret experiences in their lives. To achieve insight into how regret affects people, it is important to understand what it is that people regret most in their lives and the reasons behind their regrets (Gilovich & Medvec, 1995). People's *experience* with regret is the focus of this research project. The remainder of the introduction will concentrate on previous research in this area.

The following sections describe the main areas of regret research that are relevant to the present study. Each section will outline what current and previous research has found for each area and the theories that are associated with it. Following this, additional areas of regret that have not been covered by past research and which are relevant to the present research will also be described.

2.1 Regrets of Action and Inaction

One of the major areas of study in the field of regret research looks at the difference in regrets caused by actions and regrets caused by inactions. An example of action regret is regretting that you cheated in an exam. An example of inaction regret is regretting that you *didn't* study harder at university. Comparing these two different types of regret has generated much research and it is to this topic that we now turn.

In the early studies of counterfactual thinking (e.g. Kahneman & Tversky, 1982a; Landman, 1987a), people were found to associate different levels of regret for negative outcomes that were a result of an action or inaction. In a pioneering study, Kahneman and Tversky (1982a) had participants respond to a scenario-based question, which compared two characters, who experienced the same negative outcome; one result caused by an action and the other by a failure to act. The researchers found that the participants rated the action as producing *more* regret than the inaction, suggesting that it was not only the outcome that affected feelings of regret.

Since this early study, other researchers have replicated these findings using vignette-based studies, with results clearly indicating that people place more emphasis on actions causing regret than they do on inactions (Landman, 1987a; Spranca, Minsk & Baron, 1991). Spranca, Minsk, and Baron (1991) found that when some of the participants in their study were asked about a hypothetical scenario, they showed a preference to accept greater harm by not acting, to avoid the consequences of an action.

These 'scenario-type' studies however, have been criticized for not being a fair representation of experienced regret in real life, because they deal with simple hypothetical situations that often only have limited options (as mentioned in Chapter One). Research that has looked at people's *real life* regret experiences has found that the opposite is true: When people are asked about their biggest regrets in life, the majority mention things they have failed to do (e.g. Fry & Barker, 2001; Baum, 1999; Feldman, Miyamoto & Loftus, 1999; Gilovich & Medvec, 1994; DeGenova, 1992). Gilovich and Medvec (1994) found that 75 percent of their respondents

indicated that they not only experienced regret for inactions more frequently than actions, but that the inaction regrets were more significant than the action regrets. This result was supported by Feldman, Miyamoto and Loftus (1999), who found that participants reported their deepest regrets as 'inactions' more often than 'actions'. This pattern has been shown to affect men and women alike as well as all age groups (Gilovich & Medvec, 1994). Kinnier and Metha (1989), also found that the majority of regrets reported by participants at three stages of life (20-29, 35-55, 65 and older) were failures to act.

The discrepancy in results between action and inaction regrets in these various studies may be a due to methodological differences in the research. For example, the 'regret' that people report in hypothetical vignettes may not be how they would actually feel in similar real-life regret situations. Therefore participants may not be able to accurately predict their regret intensity when responding to these scenarios (Feldman, Miyamoto & Loftus, 1999). This could result in participants *overestimating* the intensity of regret caused by actions in these scenarios.

A number of real life factors are also excluded from these hypothetical regret scenarios. In a typical scenario the same bad outcome is produced either by a single action or inaction. Therefore participants only have to make a simple 'yes/no' choice based on limited information. In real life, however, the outcomes of actions and inactions causing regret may not be the same. The content of regrets of action and inaction are often fundamentally different, so direct comparison is often impossible. For example, there are certain bad events caused by actions (such as physical violence), which cannot be attributed to inactions. At the same time there are bad events caused by inactions (such as avoiding the dentist), which cannot be attributed to actions (Feldman, Miyamoto & Loftus, 1999).

Overall, studies that look at regret from a hypothetical point of view, "...only examine people's *intuitions* about regret not the experience of regret itself" (Gilovich & Medvec, 1994, p358). Although these scenario-based studies that have found actions to be regretted more than inactions, this may not be an accurate representation of people's real regret experiences. Therefore the questions relating to hypothetical regret may be fundamentally different from studies that are focused on

real life regret experiences, resulting in more regret for actions (Feldman, Miyamoto & Loftus, 1999).

With these findings in mind, this study is interested in seeing whether there is any difference in the frequency and significance of action and inaction regrets in people's real life experiences. The study will be using a similar method to Gilovich and Medvec (1994) in which participants were asked about their regret experiences, and prompted to list some of these regrets from their past (as opposed to answering questions about a regret 'scenario'). These regrets will then be coded into either regrets of action or regrets of inaction, to see whether in fact there is a distinction between the two types of regret.

2.2 Temporal Pattern of Regret

Some researchers have suggested that the different findings for action and inaction regret are not contradictory, but show a pattern for regret, which changes over time. Gilovich and Medvec (1994; 1995) have combined the differing results from experimental research and descriptive research, to suggest that there is a *temporal pattern* to the experience of action and inaction regret. They state that actions may "...Generate more regret than inactions in the short-term, but over time the pain of regrettable actions diminishes, whereas regrettable failures to act grows" (Gilovich & Medvec, 1994, p. 360). Therefore because most scenario-based research deals with situations from the short-term (as opposed to situations from the distant past), it is probable that an *action*, which leads to a bad outcome, is more likely to cause regret. However, descriptive research asks people to describe the significant regrets in their lives, which over time are more likely to be *inactions*.

Gilovich and Medvec (1994) tested this theory, by asking participants to describe their greatest regret of action and inaction from the previous week and also from their entire lives. They found that while both actions and inactions were regretted equally from the past week, over 84 percent of the regrets from peoples' entire lives were regrets of inaction. Thus, while actions may hurt more initially, in time these reduce in intensity and it is inactions that become more regretful. A number of reasons for this temporal pattern to regret have been suggested. Gilovich and

Medvec (1995), propose that there are three alternative categories of mechanisms that contribute to this temporal pattern.

Group 1- Mechanisms that reduce the pain of regrettable actions

One of the mechanisms of this group is *dissonance reduction*. This mechanism suggests that people will experience more dissonance (i.e. become more unsettled) following a negative outcome caused by action than by inaction. Consequently, when people experience this dissonance, they are more likely to try and reduce it if it has been caused by an action (by dealing with the regret) than if it has been caused by inaction (Gilovich & Medvec, 1995). Gilovich, Medvec & Chen (1995) investigated this and found that their participants tried to reduce dissonance for a regrettable action more often than they did for a regrettable inaction. Thus by dealing with the action regrets more thoroughly in the short-term, it is the inaction regrets that are regretted more in the long-term.

In another mechanism, people seem to *actively* try and reduce the pain for actions more than they do for inactions. Gilovich and Medvec (1995), found that when asked, the majority (65 percent) of their participants revealed that they had tried to make more changes to deal with regret caused by actions than they had for regret caused by inactions. Also a study by Zeelenberg, van der Pligt & Manstead (1998) looked at the undoing of interpersonal regrets for actions and inactions. The authors found that people were much more likely to apologise, and apologise more quickly, for a regretted action than for a regretted inaction, thus dealing with the regret.

This characteristic of reducing pain is not only limited to physical changes. People are also more likely to take *psychological* steps to reduce the pain of regret for actions than for inactions. A study of 60 adults found that the majority of them (75 percent) reported that their most regrettable actions had more "silver linings" than their most regrettable inactions (Gilovich & Medvec, 1995).

Group 2 - Mechanisms that bolster the pain of regrettable inactions

One factor that makes regrets of inaction more painful is the fact that we become more confident of situations in retrospect, often forgetting the fear and embarrassment that caused us not to act in the first place (Gilovich & Medvec,

1995). A study by Gilovich, Kerr, and Medvec (1993), showed that the further removed students were from the time of an exam the less likely they were to recall the stress associated with the exam, and the more confident they became of their performance. These findings can be applied to the temporal pattern of regret: As the passage of time increases after an event, we may forget the negative variables associated with that event that caused us not to pursue it. Thus when we look back we are unable to explain why we did not act and therefore we regret the decision (Gilovich & Medvec, 1995).

Studies have also shown that it may be easier for people to come up with reasons for why they acted than for why they did not act (Kahneman & Miller 1986; Hansen & Hall 1985; Dunning & Parpal 1989; all cited in Gilovich & Medvec, 1995). Thus a regretted action may make *more sense* in hindsight than a regretted inaction, and cause less pain.

A third factor that can bolster the pain of regrettable inactions comes about from the imagined consequences of what might have happened if only one had acted. Research has shown that people spontaneously generate alternative outcomes in their mind when they experience actual negative outcomes (Gleicher, et al., 1990). While bad outcomes for actions are limited to the event that actually happened, when a person's regret because of a *failure* to act, may lead to him or her imagining numerous positive outcomes that might have occurred (Gilovich & Medvec, 1995). This means that for every negative outcome caused by a failure to act, there are an endless number of possible outcomes which a person may regret missing. Overall this could increase the pain of regrettable inactions (Gilovich & Medvec, 1995).

Group 3 – Factors that promote the cognitive availability of regrettable inactions
The *Zeigarnik effect* proposes that people are more likely to remember incomplete tasks or goals better than completed or accomplished tasks or goals (Zeigarnik, 1935, cited in Gilovich & Medvec, 1995). This effect may be a factor in the temporal pattern of regret. In other words, because regrets of inaction often involve tasks or goals that are incomplete (i.e. they are unresolved issues), people are more likely to remember them more clearly than completed actions, because they think about them

more often (Savitsky, Medvec & Gilovich, 1997). Thus the *intensity* of regret for inaction is not increased, but the frequency with which we ruminate over it (and therefore *feel* it) is increased. Research has shown that people are able to recall more regrets of inaction than regrets of action (e.g. Savitsky, Medvec & Gilovich, 1997) thus supporting the hypothesis that the Zeigarnik effect plays a role in maintaining the temporal pattern of regret.

Group 4 - Other mechanisms for the temporal pattern of regret.

Other researchers have also suggested mechanisms which may support the temporal pattern of regret. If a person feels more responsible for negative outcome as a result of an action taken than as a result of a failure to act (see van Dijk, van der Plight, & Zeelenberg, 1999; Medvec & Gilovich 1994; Zeelenberg, van Dijk & Manstead, 1998), a person may be more likely to explain a regrettable outcome as being caused by an inaction, so that self-blame is reduced (Feldman et al., 1999). This is known as the *postevent framing hypothesis* and it proposes that, "there may be biases toward construing the antecedents of regrettable inactions" (Feldman, Miyamoto & Loftus, 1999, p.252). Thus although someone may have regretted an action in the past they report it as an inaction to reduce their accountability. If this were to occur, there would be more regretted inactions than actions.

The *spotlight effect* is another mechanism which may contribute to the temporal pattern of regret. This theory speculates that, "People tend to believe that more people take note of their actions and appearance than is actually the case...that the social spotlight shines more brightly on them than it really does" (Gilovich, Medvec, & Savitsky, 2000, p211). The results from research on the spotlight effect have implications for regret. Many failures to act stem from the perception that we will be negatively assessed, rejected, or made to look stupid or incompetent. Thus people are less likely to pursue goals or activities, because of the fear of being negatively evaluated. This lack of action can then lead to regrets for not pursuing them at a later date, resulting in more regrets of inaction in the long run (see Gilovich, Kruger & Medvec, 2002). Research on the spotlight effect has shown that these negative assumptions may be ill-founded and that people are unlikely to hold such negative judgments about other people's actions or even remember them (Gilovich, Medvec & Savitsky, 2000).

A similar hypothesis proposed by Feldman, Miyamoto and Loftus (1999, p.251), is the *behaviour selection hypothesis*. This states "People are more likely to anticipate when an action might lead to a bad outcome than when a failure to act might lead to a bad outcome...therefore people are more likely to suppress an action and so would have more inactions to regret than actions." Spranca, Minsk and Baron (1991) found evidence of this hypothesis in their research. Participants were more likely to accept a negative outcome by suppressing an action (i.e. less responsible) even if the result was worse than an outcome caused by an action (i.e. more responsible). At a later time this failure to act is likely to be regretted.

Overall then, these various mechanisms provide evidence for a temporal pattern of regret. Although the mechanisms have been described separately, they are in fact interrelated and are not necessarily separate effects (Gilovich & Medvec, 1995). For example, minimising the pain of a regretted action by looking for 'silver linings' is a more specific method of dissonance reduction. Minimising the pain felt by this regretted action is likely to make it less cognitively available to recall at a later date resulting in less regrets of action than regrets of inaction. Therefore because the experience of regret is a complex phenomenon, no single mechanism is likely to explain why someone regrets inaction more than action.

The present study will be testing the theory that there is a temporal pattern to the experience of regret. Participants will be asked to indicate *how long ago* an event that caused regret occurred. They will also have to indicate *how long after* the event they felt regret. Based on the temporal pattern theory, regrets of action are associated more with the near past and regrets of inaction are associated more with the distant past. Therefore, if action regrets are more significant in the shorter term, but inaction regrets are more significant in the long term, further evidence is provided for a temporal pattern.

The present study also aims to further investigate the relationship between action and inaction regrets, to see whether action that leads to regret causes a person to regret their decision sooner after the event than inaction. For example, although inaction might cause someone to regret a decision, that person may not actually feel *regret*

until well after the event. Alternatively, regret caused by an action may be felt immediately after the event. This idea will be tested by having participants report how long it was after an event occurred, that they felt regret for their decision. These time factors will then be compared to see whether there is any difference between regrets of action and inaction.

2.3 Alternative explanations to the Temporal Pattern of Regret

Despite the evidence for the temporal pattern of regret some authors argue that this model is too simplistic and that certain factors can influence whether the temporal pattern will be observed and how strongly regret will be felt. Seta, McElroy and Seta (2001) take the view that the desirability and consistency of an outcome may influence judgments about regret and even reverse the temporal pattern that is typically observed. In a study that looked at whether regrets of action or inaction were affected by the perceived desirability of an outcome, these researchers found that participants rated outcomes that were more consistent with their orientation (e.g. more desirable for them) as less regretful, regardless of whether they were the result of an action or not.

Another argument against the temporal pattern of regret is that short-term regret and long-term regret are in fact two distinct emotions sharing the same name but representing different feelings. Kahneman (1995) argued that regret has different *emotional profiles* that may provide an alternative interpretation to the temporal pattern of regret. He proposes that the pattern of action and inaction regrets over time, "...reflects a difference in both the content and emotional tone, between thoughts of mishap from the recent past and more distant thoughts of ways in which one's life could have been better" (Gilovich, Medvec & Kahneman 1998, p 603).

Kahneman (1995) labelled these two variants of regret as: *hot* regrets, which are related to short-term evaluations, are more painful and associated with actions; and *wistful* regrets, which are dominated by thoughts about the distant past, are less painful and are associated with inactions. He argued that action and inaction regrets are associated with different time periods, rather than the regrets themselves changing characteristically over time.

This alternative theory was tested in a study by Gilovich, Medvec and Kahneman (1998). They tested participants to see whether action and inaction regrets did in fact differ systematically with regard to the type of emotions they elicited. These authors identified three clusters of emotions evoked by regrets of action and inaction (as opposed to only the two clusters suggested by Kahneman (1995). These three clusters were: *hot* emotions (e.g. anger, shame, disgust) *wistful* emotions (e.g. nostalgic, sentimental) and a third cluster, *despair* emotions (e.g. empty, helpless, sad).

Regrets of action were more associated with *hot* emotions, while regrets of inaction were more associated with *wistful* and *despair* emotions. Thus these results are consistent with the contention that regrets of action and inaction do differ systematically in the type of emotions they evoke. The results also suggest that these three emotional profiles of regret may be more prevalent at different times throughout one's life (Gilovich, Medvec & Kahneman, 1998).

Therefore it could be this difference in regret *emotion* that causes people to have more regrets of inaction in the long run, rather than a temporal pattern where the intensity of inaction regret increases over time (Gilovich, Medvec & Kahneman, 1998). The present study is interested in investigating this issue of whether regrets of action and inaction evoke different types of emotion. In a similar method to Gilovich, Medvec and Kahneman (1998), participants will be asked to indicate to what level a significant regret causes them to feel a number of different emotions. The ratings of these emotions will then be compiled for both regrets of action and inaction. Thus, any difference in emotional content between action and inaction regrets, will provide evidence for the contention that they differ consistently in the emotions they evoke.

2.4 The Content of Regret

Another topic that researchers have been interested in finding out about is the *content* of people's regrets. This has prompted studies to investigate what type of regrets are the most common. In these studies participants are typically asked to respond to questions about the actual regrets they have about their past. In one such study,

Gilovich and Medvec (1994, p358) asked participants directly, "When you look back on your life to this point, what are your biggest regrets?" The regrets reported were then coded into different categories, depending on their content. The two most common categories of regret were *missed educational opportunities* and *failing to "seize the moment"* (p359). Other frequently mentioned regrets were missed romantic and personal relationship opportunities.

Other researchers have found similar results. Kinnier and Metha (1989) asked the participants in their study what they would do differently if they were able to change something about their past. The most common regret was "I would have taken my *education* more seriously and worked harder on it" (39 percent of group) and the second most common "I would have been *more assertive*" (24 percent). DeGenova (1992, p141) also reports from the results of her study, "If life could be lived over again, more time would be spent pursuing education…than in any other area."

Missed educational opportunities appear to be regretted by even the most intelligent people. A study by Hattiangadi, Medvec and Gilovich (1995) looked at the content of the regrets reported by the "geniuses" that were studied by Lewis Terman. The study showed that even these highly intelligent people rated 'missed education' as their biggest regret. Education first and foremost seems to be an area that many people wished they had dedicated more time to.

The present study is concerned with discovering the areas of people's lives that are commonly regretted. This section will be a based on the research conducted by Lecci, Okun and Karoly (1994) who used a 13-category scheme to see what areas of life are most commonly regretted. Participants will be asked to list up to three regrets and each of these regrets will be coded into one of the 13 different content categories. The frequency of each category will then be calculated to see what types of regret are experienced most commonly.

Age Differences of Regret

Regrets in life are often associated with older adults and having a 'mid-life crisis'. This may be because most of the major decisions in life, (often the biggest sources of regret) such as pursuing a higher education, career, marriage or whether to have

children, are usually only made once a person reaches adulthood. Therefore the older a person becomes the more responsibility they take on and accordingly, there are more opportunities to make mistakes and suffer losses. Consequently, they may then have fewer opportunities as the range of available choices in life narrows (Landman, 1993).

Although most research looking at what people regret has been conducted with predominantly adult populations (i.e. mean age of at least 30) studies with teenage and young-adult populations have shown that regret is not confined to older adult populations (e.g. Landman, 1993; Lata, Nakamoto & DeGenova, 1997)[1]. Teenagers report having regrets about decisions they have made and often with the same level of insight as older adults.

The possibility that people have different types of regrets at different ages has prompted research see whether there are differences in the content of people's regrets, as they get older. Interestingly, regrets of *education* seem to be common to all age groups. Looking at the regrets of people from three different stages of life (20-29, 35-55 & 64 or older), Kinnier and Metha (1989) found that regret about *education* was the most common among all groups. Lata, Nakamoto and DeGenova (1997) found that college students (mean age 20.5 yrs) wished they had been more dedicated to their education, while Baum (1999) found that an older adult population (mean age 79.5yrs) rated regrets of education/career most frequently.

Other areas of regret, however, do appear to differ between different age groups. Younger people seem to be more concerned with regrets of career, ambition, leisure and romance, while older participants report more regrets about missed time spent with family and friends, with fewer regrets about foregone ambition and assertiveness (Lecci, Okun & Karoly, 1994; Kinnier & Metha, 1989). Gilovich and Medvec (1994) also found older individuals were more likely to report things they failed to do than younger participants, though this finding was not statistically significant.

---

[1] No known research has been conducted with a population any younger than teens. Therefore no assumptions about regret can be made to a younger population.

These differences in regret between age groups make sense. Older people regret things they are no longer able to experience while younger people regret things that may affect their future. In other words, as people age, priorities in their life change. Studies have shown that people's priorities do indeed change as they age. For example, Kinnier and Metha (1989) found that the elderly population in their study (mean age 70) rated *family* as their number one priority more often than the younger population, and career was also ranked less important as age increased. As priorities change so the mindset of a person changes and therefore some issues that may have once caused regret will no longer seem relevant (such as career and ambition). The flipside is that other issues that were not deemed previously to be important may become new sources of regret (such as not spending enough time with family).

The present study will be looking for age differences in regret content, to see whether older adults generally have different regrets to younger adults. Based on previous research it is expected that some age differences will be noted.

Gender Differences of Regret

Research has also focussed on the differences of regret between men and women. Landman (1993) has reported that 'differences' between men and women more often reflect social stereotypes for gender rather than actual differences in regrets. Despite this view, studies have found some variation in the incidence and content of regrets for gender.

Women's regrets have often focused *more* on education and the missed opportunities of career than men's regrets (Stewart & Vandewater, 1999). Metha, Kinnier and McWhirter (1989) asked women their biggest regrets and found that 38 percent cited education as a missed opportunity. This percentage is significantly higher than the percentages reported by males for educational regrets (e.g. 25 percent) (Lecci, Okun & Karoly, 1994). This difference in perceived achievement may reflect the different opportunities that were available for men and women adults as they were growing up (Holahan, Holahan & Wonacott, 1999).

Kinnier and Metha (1989) also found that men were more likely to regret not having spent more quality time with family (20 percent men compared with 10 percent

women). Lecci, Okun and Karoly (1994) reported that men had significantly more regrets associated with not spending enough time doing leisure activities. In the same study, men rated their careers as being their number one priority more often than women, who placed career after their family. This may reflect the fact that men have historically spent more time at work and focussing on their careers.

Overall then, men and women's regrets are arguably more similar than they are dissimilar in both content and incidence (Landman, 1993). As women are now given more opportunities to focus on education and career than they did in the past, these few differences in regret between the genders will possibly become even less distinct. The present study will be also looking at the content of regrets, to see if there is any gender differences in the type of regret reported. The results from this study will indicate whether there are still regret differences for gender, and whether this trend is as apparent as it was 10 years ago.

2.5 The Rationality and Functionality of Regret

An interesting debate concerning regret is whether it is a *rational* response to a negative experience or not. From a 'rational thinking' point of view regret may be deemed irrational because it focuses on the past and therefore considered a *sunk cost*. (Zeelenberg, 1999; Landman, 1993). This is explained in the quote, "Rational decisions are based on an assessment of future possibilities and probabilities. The past is relevant only insofar as it provides information about possible and probable futures" (Dawes 1988, cited in Landman 1993, p31). Thus from a 'rationalists' point of view, to feel regret about the past is irrational because it involves expending effort and emotion on something that you cannot change.

Other researchers have refuted this, arguing that regret can have both rational and functional value. (Zeelenberg, 1999). They claim that the way a person deals with their regrets will determine whether their regrets serve a destructive or constructive function. One area of the present study will look at the functionality of regret and whether people's regret experiences are mostly negative or whether they can have positive effects as well.

Destructive Functions of Regret

Regret is often viewed as an entirely negative experience because it can 'paralyse' a person into dwelling on the negative aspects of their past and not moving forward (Landman, 1993). Regret also usually involves an admission that one has made a poor decision and this can cause feelings of self-doubt and pessimism. Landman (1993, p31) states at least three ways in which regret might prove destructive through sheer excess: an excessive amount of time spent in regret; an excessive level of emotional intensity involved with the regret; and excessive importance might be given to the regretted decision.

Research evidence supports the notion that regret can lead on to more serious emotional problems such as depression, neuroticism and general psychological distress (Landman, 1993). There is some indication that past regret or at least dwelling on regret can have a negative impact on one's psychological well-being.

Lecci Okun and Karoly (1994) found that the participants who reported a higher depressive score were able to recall more readily regretful concerns. The more effort participants invested into a situation that was ultimately regretted, the greater the disappointment if no progress was made. In other words, this depression seems to be associated with feelings of disappointment that stem from an inability to achieve or pursue ones regrets, even though time and effort have been invested towards this goal (Lecci, Okun & Karoly, 1994).

Seiden (2001) conducted a study which looked at the relationship between regret and the quality of life in a sample of professionals. In a survey participants were asked about their biggest regrets in their personal and working lives. The majority of them reported that family and romantic regrets had had the most severe effect in their lives; this effect was worse for women. Thus regret can affect people's quality of life, depending on how intense these regrets are and what areas of their life are affected.

Other research has shown that regret can affect life satisfaction. DeGenova (1993) looked at a population of older participants (mean age 72) and the effect of regretfulness on their life satisfaction. They found that regretfulness was ranked

third (only behind social activity and health) as a predictor of life satisfaction. Kinnier and Metha (1989) also found that when regrets were correlated with life satisfaction, some significant relationships emerged.

Overall this research indicates that regret for past events *can* have a negative influence on one's current life. The present research aims to investigate the role of regret in people's lives, by measuring it on five different scales. These scales will measure the frequency of regrets, the intensity of regrets, the frequency of regret thoughts, the impact of regrets, and the type of regret impact. Although studies in the past have looked at important aspects of the function of regret, no research has tried to directly measure the overall affect of regret experiences. Therefore this aspect of the present study is unique.

The relationship between regret and life satisfaction will also be directly tested in this study, by measuring regret on different scales and correlating this with life satisfaction scales. The aim is to determine whether regret has a negative relationship with life satisfaction.

Constructive Functions of Regret

Regret does not necessarily have to be 'paralysing' or entirely destructive. It all depends on how a person deals with their negative experiences. Regret has many *constructive* functions that can motivate a person to move 'onwards and upwards'. If regret is properly handled it is not always an entirely negative experience and in fact can serve a number of beneficial purposes (Landman, 1993). Because experiencing regret can make an already negative experience more painful, the regret we feel can then provide a valuable message that something is wrong (Landman, 1993). We are more likely to remember this negative feeling of regret and try to avoid this feeling in the future. In this way regret can motivate a person to learn from his or her mistakes and help him or her to avoid similar experiences in the future (Zeelenberg, 1999).

Regret is also constructive when it helps us to undo the cause of a mistake. This undoing can be in the form of real actions, such as apologising for a mistake we made (see Zeelenberg, van der Plight & Manstead, 1998), or cognitive undoing, such

as making a mental note not to repeat something (Zeelenberg, 1999). Overall regret has the potential to mobilize a person into action and motivate him or her to behave more appropriately in the future.

One way to overcome regret and therefore improve life satisfaction is by *reflecting* on the past and taking steps to deal with regret (either behaviourally or cognitively). As people age it is not uncommon for them to reflect on and evaluate their lives. In fact research has shown that reflecting on past regrets and unresolved issues can enhance life satisfaction (Butler, 1963 cited in DeGenova, 1993). The act of reminiscing about past events has been shown to positively influence aspects of psychological well-being, life satisfaction, cognitive functioning and depression (Haight, 1988; Hughston & Merriam, 1982; Coleman, 1974; & Fallot 1979, all cited in DeGenova 1993).

By coming to terms with the regrets of one's past, research suggests that life satisfaction will be higher than if regrets are left unresolved. Holahan, Holahan and Wonacott (1999), conducted an investigation that looked at the relationship between a midlife appraisal of having lived up to one's expectations, and life satisfaction. The results showed that those who had reflected on their lives and made changes according to life expectations had fewer regrets and were more satisfied with their lives. Those participants who felt they had not achieved what they had expected reported more regrets and were less satisfied with their lives. Overall the findings from this study are consistent with the idea that regrets arising from negative comparisons can initiate a mental "undoing" of the event (Roese & Olson 1995, cited in Holahan, Holahan & Wonacott, 1999). People may become more satisfied with their lives if they are able to mentally undo past regrets and learn from them.

This theory that life review and dealing with one's regret can have a positive effect on one's life satisfaction may help to explain why older people tend to have *fewer* regrets than younger people. Baum (1999) found that in the older population he studied, 43 percent reported having no life regrets at all and Lecci, Okun and Karoly (1994) also reported that in their study older individuals reported somewhat fewer regrets. As older people are increasingly confronted with their own mortality they review their lives and may disengage themselves from painful memories, such as

regrets (Baum, 1999). For them it may no longer be important to recall these negative moments so they forget them or repress them

The issue of whether people perceive regret as having a positive effect (and therefore a constructive function) in their lives will also be directly assessed in the present study. Participants will be asked directly whether they perceive their regret experiences to be positive and/or negative. These responses will help provide understanding as to whether people see their regrets as having a constructive function or whether they are seen as mostly destructive.

Because regret is such a complex phenomenon and very situation specific it is difficult to make general 'cause and effect' type statements about its overall role in a person's life. The expectation that we all will experience regret at some time in the future is practically universal. The effect regret has depends on how it is dealt with; whether you dwell on your mistakes and let them become a destructive burden, or whether you learn from your mistakes and let them motivate you into positive action.

2.6 Summary

The first two chapters have provided general background information about regret and the research areas that are relevant to the present study. Chapter one provided an introduction to the concept of regret. Regret was described as having both cognitive and emotional aspects.

Next the writer pointed out that regret is difficult to distinguish from other similar emotions and as a result there is disagreement as to how it should be defined. Some definitions of regret were provided and some of the issues associated with them. These included whether personal responsibility is essential for regret and whether you can regret the same repeated decision. The writer mentioned that the present study was going to address these two definition issues.

After this two different methods of research were outlined. These were experimental methods, which use 'regret scenarios' and descriptive methods, which ask directly about peoples regret experiences. It was then explained that the present study would

be using a descriptive method to conduct research because this is a more accurate measure of people's real life experiences.

Chapter two was concerned with outlining the research areas of regret relevant to the aims of the present study. Each area included descriptions of previous research findings and theories associated with the specific areas of interest. Each area also outlined the focus of the present research.

The first area of interest looked at the difference in regrets caused by actions and inactions. Here the writer summarised the differences between experimental methods which have found actions to generate more regret than inactions, and descriptive methods which have found that people's greatest regrets in their lives are inactions. It was then explained that the present study would be using a descriptive method of research to see whether there was any distinction between regrets of action and inaction in people's life experiences.

Following this the writer introduced the theory that there is a temporal pattern to the experience of regret: although actions may cause more regret in the short-term, these regrets diminish over time so it is failures to act which are regretted more in the long term. Some evidence for this temporal pattern was provided, as was an outline describing how the present study was also going to test this theory. The writer then described a number of mechanisms suggested by various researchers to help explain this temporal pattern of regret. These included mechanisms that reduce the pain of regrettable inactions, mechanisms that bolster the pain of regrettable inactions, mechanisms that promote the cognitive availability of regrettable inactions and various others.

The next section offered some alternative explanations to the temporal pattern of regret, including the argument that regret has different emotional profiles. In this area researchers have found that regrets of action are more associated with *hot* emotions while regrets of inaction are more associated with *wistful* and *despair* emotions. It was then outlined how the present study would investigate whether action and inaction regrets evoke different types of emotion.

The next main area of chapter two addressed the content of people's regret. This section presented findings from previous research and showed that regrets about 'education' and 'not being assertive' were common. Data about age and gender variables was also presented to show that there are differences in regret content between sexes and for people at different stages of life. The writer then went on to state that the present study would be looking at the content of people's regrets as well as testing for gender and age differences in this area.

The final main area of chapter two looked at the rationality and functionality of regret. Here it was explained that from a 'rational thinking' point of view, regret is irrational. However regret can have functional value and depending on how a person deals with regret, this function may be destructive or constructive. The writer outlined some background research that shows regret can be destructive and how it can lead to further emotional problems. Research has also shown that regret can be a predictor of lower life satisfaction. Here it was mentioned that the present study would be going to see whether there are correlations between scores on regret scales and scores on life satisfaction scales.

Following this it was explained that regret is not always a negative experience and that it can serve a number of constructive purposes. Past research has indicated that life satisfaction is higher for those people who reflect on their past and take steps to overcome their regrets. Finally the writer explained that the present study would be investigating whether people report that their regrets have a positive (constructive) effect in their lives, or whether their regrets are mostly negative (destructive).

In light of the descriptions provided in the first two chapters, the reader should now have an appreciation of the relevant areas of regret that the present study will be focussing on. The next chapter will describe the specific aims and hypotheses of the present study.

CHAPTER THREE

Aims and Hypotheses of the Present Research

The previous two chapters have provided the reader with an understanding of the theoretical and empirical background of the present research. Chapter one provided an explanation for regret and some of the issues that surround its definition. Chapter two outlined the main areas of research concerning the experience of regret and the main findings associated with these areas. Having done this, it is now possible to outline the specific aims of the present research and the hypotheses that are associated with each area.

The first aim of the research is to investigate the content of people's regrets and to see what regrets are considered to be the most significant. This aspect of the study is essentially a replication of Lecci, Okun and Karoly's (1994) research. The participants' regrets will be coded into one of 13 different content areas. These regrets will also be coded into either regrets of action, regrets of inaction, or regrets beyond the participant's control. Gender and age differences for regret content will be tested to see if there are any notable differences in the type of regrets people have as they age. From the research of Gilovich and Medvec (1994) and other researchers that have looked at the experience of regret (e.g. Feldman 1999, Baum 1999,Lecci Okun & Karoly, 1994) the following hypotheses can be generated:

Hypothesis 1. Participants will report more regrets of inaction than action and that out of these regrets, the participants will rate regrets of inaction as more significant than regrets of action.

Hypothesis 2. Participants will mostly report regrets in which they have been responsible for the outcome.

Hypothesis 3. There will be age and gender differences in the content of regret reported. No specific predictions will be made about what form these differences will take. (However, it is worth noting that in previous research younger participants have been more concerned with regrets of career, ambition, leisure and romance,

while older participants report more regrets about missed time spent with families. Also women's regrets about the past have focused more on education and missed opportunities of career and achievement in this area. While men have been found to more often regret not having spent time with family and not spending enough time doing leisure activities.)

The second aim of the research is to see whether there are different emotional profiles for regrets of action compared with regrets of inaction. This part of the research is in part a replication of the study by Gilovich, Medvec and Kahneman (1998) and will follow their method by having participants rate their regrets against different emotions. The main difference in the present study is that participants will be rating on a frequency scale (i.e. how often), rather than a quantity scale (i.e. how much) that was used in their study. This change has been implemented because frequency is often easier to understand and measure than quantity. Thus it will be easier for participants to recall *how often* they feel a certain emotion, than it would be for them to recall *how much* they feel a certain emotion. The following hypothesis is:

Hypothesis 4. Regrets of action will evoke more frequent *hot* feelings than regrets of inaction and conversely regrets of inaction will evoke more frequent *wistful* and *despair* feelings than regrets of action.

A third aspect of this research is to look at the time frame of regrets of action and inaction. The aim is to see whether there is a temporal pattern for regret i.e. whether regrets in the near past will be more commonly actions and regrets of the distant past will be more commonly inactions. Also to see whether action causes a person to regret their mistake sooner after the event than inaction. Therefore based on the previous findings for the temporal pattern of regret (e.g. Gilovich & Medvec, 1995), the following hypotheses are:

Hypothesis 5. Regrets from the near past will more commonly be regrets of action and regrets from the distant past will more commonly be regrets of inaction.

Hypothesis 6. Action will cause a person to regret their mistake sooner after the event than inaction.

The next main area will be investigating the general role of regret in people's lives and seeing whether the experience of regret is related to life satisfaction. This area is loosely based on some previous research findings, which have shown that there is a negative relationship between regret and life satisfaction (e.g. Lecci, Okun & Karoly 1994; DeGenova 1993; Holahan, Holahan & Wonacott 1999). Regret will be 'quantified' in four different areas by having the participants complete four different scales that will measure: the number of past regrets, the intensity of past regrets, how often they think about their regrets and, how big an impact the regrets have had in their lives. The scores from these four scales will be correlated with three life satisfaction scales to see whether there is a significant relationship between regret and life satisfaction. Therefore based on previous research with regret and life satisfaction the following hypotheses are:

Hypothesis 7. People who have more regrets will be less satisfied with their lives than people who have fewer regrets.

Hypothesis 8. People who rate their regrets as more intense will be less satisfied with their lives than people who rate their regrets as less intense.

Hypothesis 9. People who think about their regrets often will be less satisfied with their lives than people who *do not* think about their regrets often.

Hypothesis 10. People whose regrets have had large impact will be less satisfied with their lives than people whose regret have had a smaller impact.

The final part of the present study is interested in the functional potential of regret. The aim of this part is to investigate whether people see their regret experiences as entirely negative or whether they have gained some positive things from these experiences. This data will also be compared to see if there is a difference in life satisfaction between people who only see regret as negative (destructive) and those who see some aspects of regret as positive (constructive). The study will also

explore some of the reasons why regret has a negative/positive impact on people's lives. Taking into account Landman's (1993) report on the functional aspects of regret and other research findings (e.g. Zeelenberg, 1999; Holahan, Holahan & Wonacott, 1999), the following hypothesis is proposed:

Hypothesis 11. People whose regrets as have had negative impact will be less satisfied with their lives than people whose regrets have had a positive impact.

Having outlined the aims and hypotheses of the study, the next two chapters will describe the detailed methodology used and the results obtained.

CHAPTER FOUR

Method

4.1 Participants

The participants consisted of 101 adult volunteers from the general population. Of this group there were 24 males, 76 females and 1 unspecified. The ages of the participants ranged from 19 to 62 with a mean age of 32.5, (S.D.=12). The sample was one of convenience, where potential respondents were approached by the researcher (or other associates) and asked to participate in the study.

Participants were asked to indicate their highest educational qualification. Five percent of the population had no formal school qualification and 8.9 percent had only school certificate passes. Twenty-nine percent had High School Qualifications, University Entrance or above, while five percent had a trade/professional certificate. The majority of the respondent population (50.5 percent) had a University degree, diploma or certificate.

4.2 Measures

A questionnaire (see Appendix A) was designed by the researcher to test the hypotheses of the present study. It was made up of 5 main sections. Section one asked questions about the participants' *specific* regret experience, section two asked questions about their *general* regret experiences, while the third section was specifically for those participants who reported having *no regrets*. Section four contained three life satisfaction measures and section five asked for some general background information about the participants.

SECTION 1

Action/Inaction regrets

The frequency and significance of action and inaction regrets was measured using a similar procedure to that described by Gilovich and Medvec (1994). In this part of the questionnaire participants were asked "When you look back on your life to this point do you have any regrets? Please list them in the spaces below". For those participants who had regrets there was room to list up to three of them, but they were allowed to list fewer. Participants were then asked to choose their 'most important'

regret from the ones they listed[2]. Each of the regrets was then coded by the researcher and another 'blind' associate who also read and coded a random 20 percent selection of the regrets. The use of a second coder was incorporated to help eliminate researcher bias. The two coders had to determine whether each regret stemmed from an action taken or an action foregone. *Action* regret was defined as, "Any regret that is the direct result of an action taken" (for example: "I regret getting engaged against my family's wishes"). *Inaction* regret was defined as, "Any regret that is the direct result of an action foregone" (for example: "I regret not being able to express myself well in times of stress"). The two coders also had to determine whether each participant was personally responsible for their regrets (for example: "I regret saying stupid things to friends"), or whether the regret arose from circumstances beyond their control (for example: "I regret being too unattractive").

In following with Gilovich and Medvec's (1994) method, the regrets were coded according to the emphasis of subjects themselves. For example, if a person wrote "I regret getting married so young" then *getting married* was the regret that was coded and not the missed opportunities resulting from the marriage. The two coders agreed on all of the 'action/inaction' regrets coded, indicating that inter-rater agreement for this action and inaction dichotomy was 100 percent. The two coders also came to the same decisions in deciding whether the participants were 'personally responsible' or 'not personally responsible' for their regrets. Thus inter-rater agreement was again 100 percent. The number of inaction and action regrets was then calculated to determine which type of regret was most frequently listed and furthermore, which type of regret was most frequently listed as the most important.

Those participants who had no regrets could choose the option "I have no regrets in my life". Choosing this option took participants straight to section three where they were asked to elaborate by answering a question as to why they have no regrets.

---

[2] Note. On the questionnaire itself the wording was slightly different, asking participants were asked to select their 'most significant' regret, not 'most important' regret. However in the remainder of this report these will be referred to as the 'most important' regrets, to avoid confusion with 'significance' as having statistical connotations later in the Results section.

Regret content

The regrets that the participants listed in this section were also coded into different areas of content. To accomplish this a 13-category scheme was incorporated to identify the content area of each regret. This was a similar method to that used by Lecci, Okun and Karoly (1994), who designed this 13-category scheme. The 13 categories were: *Educational/Academic* (for example, "I regret not studying harder at university"), *Occupational*, (for example, "I regret not choosing an alternative career path"), *Family* (for example, " I regret not spending more time with my grandmother before she died"), *Intimate relationship* (for example, "Ruining a relationship that was perfect by cheating on my partner"), *Friendships* (for example, "I regret telling an old flatmate that no-one liked her"), *Spiritual-religious* (for example, "Not having a personal relationship with God earlier on in my life"), *Health/Self-care* (for example, "I regret not being able to control my obesity"), *Self-Trait* (for example, "I regret not being able to express myself well in times of stress"), *Financial* (for example, "I regret wasting money through my student loan"), *Temporal* (for example, "I regret not taking more time in my youth to think about my future plans"), *Leisure* (for example, "I regret never having done gymnastics"), *Dual* (for example, "I regret not advancing my professional and personal skills when I had the opportunity"), and *Other* (for any regrets not fitting into any specific category).

The researcher identified the content domain for each regret, and the same blind associate read and coded 20 percent of the randomly selected regrets. The two coders agreed on the same content categories for 35 of the 40 regrets, indicating an inter-rater agreement of 87.5 percent. The five regrets that the two coders had placed in different categories were then sorted out by having the two coders confer and reach a unanimous conclusion as which content category each regret should be placed in. The important regrets chosen by the participants were also placed into the relevant content categories using the same coding system.

The two coders also categorised the regrets based on whether they were 'interpersonal regrets' or 'non-interpersonal regrets'. An interpersonal regret was defined as, "Any regret that directly involves another person". A non-interpersonal regret was defined as, "Any regret that does not directly involve another person". The two coders came to the same decision for 36 of the 40 regrets, indicating an

inter-rater agreement of 90 percent. The four regrets that the two coders disagreed on were subsequently sorted out by having the two coders confer and reach a unanimous decision as to whether each regret was interpersonal or non-interpersonal.

Emotional Profile for regret

To find out whether action and inaction regrets have different emotional profiles, the present study used a method described by Gilovich, Medvec & Kahneman's (1998) study 2. Some minor changes were incorporated into the question to make it easier for the participants to recall (such as using a measure of 'frequency' instead of a measure of 'quantity'). The participants were asked to think about the important regret they had chosen in Question 1 and to indicate how *often* their regret made them "feel" a list of 15 different emotions. Five of these represented a *hot* emotions cluster (including: angry, disgusted, embarrassed, guilty and irritated), five represented a *wistful* emotions cluster (including: contemplative, dreamy, nostalgic, sentimental and wistful), and five represented a *despair* emotions cluster (including: empty, helpless, longing, sad, and unfulfilled). Participants were asked to rate how often their regret made them feel each emotion, by choosing the most appropriate option on a 5 item scale (ranging from 1-"Not at all" through to 5-"All the time"). For example, if a person selected 1-"Not at all" for the emotion anger, this would indicate that their regret caused them to feel angry "Not at all". Thus a score out of five was recorded for each of the 15 emotions.

Scores were then calculated for each emotion cluster by finding the total mean value of the five emotions that made up each cluster (For example: the mean score for the *hot* emotions cluster would be the average value of the angry, disgusted, embarrassed, guilty and irritated scores). These mean values were compared to see whether regrets of action were more often associated with *hot* emotions, and whether regrets of inaction were more often associated with *wistful* and *despair* emotions.

Temporal Pattern for regret

Two questions in the questionnaire tested the hypothesis that there is a temporal pattern for the experience of regret (i.e. that in the shorter-term action regrets are more important, but that in the longer term inaction regrets are more important). The first question asked participants to indicate approximately how *long ago* their

'important' regret occurred. There were 5 different options the participants could choose from. These ranged from "1 week ago" to an option where they could indicate how long ago their regret had occurred in years. Thus a time frame for each important regret was specified. This data was then compared with the data collected from the action/inaction question to see whether there was any significant difference in time periods between the two types of regret. If regrets of action were significantly more recently experienced than regrets of inaction, this would provide some evidence that there is a temporal pattern to the experience of regret.

The second question asked participants to indicate how *long after* the event occurred that they began to feel regret. Here there were 6 different options that the participant could choose from. These ranged from "Immediately after the event" to an option where they could indicate the length of time in years. The times from this question were then also compared with the data collected in the action/inaction question to see whether regrets of action cause a person to regret a decision sooner than regrets of inaction.

SECTION 2
The second section asked the participants questions about their regret experiences in general. This section was made up of five questions, each asking about a different aspect of the participants general regret experiences. Each of these questions consisted of a single five-point Likert-scale which required the participants to circle the most appropriate option on the scale.

The first question measured the frequency of the participants' regrets and the scale ranged from 1, "Very few regrets" through to 5, "Many regrets". The second question measured the intensity of their regrets and the scale ranged from 1, "Not very intense" to 5, "Very Intense". The third question asked the participants how often they thought about their regrets and the scale ranged from 1, "Not at all" to 5, "All of the time". The fourth question measured the impact of their regrets and the scale ranged from 1, "No impact" through to 5, "A very large impact". Finally, the fifth question asked about the type of impact the participants regrets had had in their lives and it ranged from 1, "Entirely negative impact" through to 5, "Entirely positive impact". The fifth question was also accompanied by an additional exploratory

question, which asked the participants to elaborate on their answer given in that question.

An overall mean value was calculated for each of the five scales. The mean score from each scale was then correlated separately with the scores on three life-satisfaction measures. This correlation was used to investigate whether regret is negatively associated with life-satisfaction.

SECTION 3

Only those participants who had chosen the option "I have no regrets" (in section 1) answered the third section. This section was made up of one exploratory question which asked the participants to explain in their own words why they had no regrets. The answers from this section were then analysed to see what these participants might do to prevent regrets.

SECTION 4

Life Satisfaction Scales

Three measures of life satisfaction were used in the present study. Two of these measures were obtained from the questionnaire used by Andrews and Withey (1976). The first of these (the GWB scale) was made up of eight semantic differential items which described how you might feel about your life in general[3]. Each item was rated from 1 to 7 and at each end of the rating scale the opposite or 'polar' adjectives were included (e.g. Boring/Interesting). On each scale the participants had to select a number that best described how they felt about their life at the present time. A total mean score was then calculated for each participant by finding the total score of each scale and dividing it by seven.

The second measure (the 'Life-scale') was a single 7-item scale (also from Andrews and Withey, 1976), used as an indicator of "how you might feel about your life as a whole"[4]. The convergent validity of this scale has been reported at 0.65 when compared with other subjective well-being measures, making it an appropriate single-item tool for measuring life satisfaction (Diener, 1984). This scale ranged from 7-'Delighted' through to 1-'Terrible'. For this scale participants had to select

---

[3] Note: Here after this measure will be referred to as the 'General-well being' scale or, the GWB scale
[4] Note: From here after this measure will be referred to as the 'Life-scale'.

the number that best described how they felt about their life at the present time. Thus a score between one and seven was recorded (for each participant) on this scale.

The third measure was an adaptation of the 'Affectometer 2', a measure for well being created by Kammann and Flett (1983)[5]. This scale has been reported as having a high level of internal homogeneity and favourable convergence validity score of 0.70, which makes it an appropriate measure of well-being (Diener, 1984). This measure is made up of 20 items that describe good and bad feelings which arise in the course of everyday living. Ten of these items are positive and 10 of these items are negative. Due to the time constraints required in the present questionnaire, however, the third measure only contained 10 items from this 20-item scale. Each item described a different feeling you might have about yourself and your life, with five of the items positive (for example: "I like myself") and five of the items negative (for example: "I feel like a failure"). Participants were asked to indicate on a Likert-scale how often they experienced these feelings, at the present time. Each scale was made up of 5 options, ranging from 1, "Not at all" to 5, "All the time"[6]. An overall 'well-being' score for the scale was then calculated by subtracting the mean score on all of the negative items from the mean score on all of the positive items. Thus a single mean score (either positive or negative) was recorded for each participant from this scale.

SECTION 5
In this final section participants were asked to disclose some general background information about themselves.

Sex: Participants were asked their sex, and were required to tick either the "Male" or "Female" option.

Age: Participants were asked to give the year of their birth and this was subsequently used to calculate their age in years.

Education level: Participants were asked to indicate their highest educational qualification from a list of, "No school qualification", "School certificate passes",

---

[5] Note: From here after this measure will be referred to as 'Affectometer 2'.
[6] Note: This scale range of 1-5 is a slight adaptation to the original 'Affectometer 2' where scales range from 0-4. Scores in the present study were later adjusted to a 0-4 scale, so that direct comparisons could be made to previous research findings.

"School qualifications, University entrance and above", "Trade certificate or professional certificate", and "University degree, diploma or certificate".

4.3 Procedure

The research was cross-sectional in design and used a self-report questionnaire to collect the data from a general population sample. The questionnaire, along with a pre-paid envelope, was initially administered to a pilot sample of 15 adult participants. These participants were asked to fill in the questionnaire and make any appropriate comments about areas of the questionnaire that were difficult or that could be improved. They were asked to complete the questionnaire and return it via mail within seven days. The researcher then reviewed these questionnaires and any comments made by the participants were taken into consideration. Most of the comments were aimed at the layout of the questionnaire and minor alterations were made to accommodate these suggestions. No fundamental problems with the questionnaire arose in the pilot survey so no major changes were made to the questionnaire for the main sample of participants.

The questionnaire was then administered to the main sample of potential respondents who were approached by either the researcher, or an associate of the researcher, and asked to participate in the study. Each potential participant was provided with a questionnaire, an information cover sheet about the questionnaire and a free post envelope for returning the questionnaire. The information cover sheet explained the background and aims of the study. The cover sheet also outlined what participation in the study involved and the ethical rights of those participating in the study. Here it was specified that participation was entirely voluntary and that the respondents did not have to answer any part of the questionnaire or feel obligated to return it. The researchers contact details were also provided for any queries or problems that the participants might have.

Two hundred and fifty questionnaires were distributed over a period of four weeks to the population sample. All potential participants were asked to fill-in and return the questionnaires within four weeks of having received them. Thus the whole data collection process was approximately eight weeks. Any questionnaires that were

posted in after this time were discarded and not used as part of the research data. In total 101 completed questionnaires were returned representing an overall response rate of 40.4 percent.

CHAPTER FIVE
Results

Of the 101 participants in the study, 91 reported having regrets about the past. A total of 215 regrets were recorded (from those persons who reported having regrets) with 18 percent of the participants listing one regret, 33 percent listing two regrets, and 40 percent listing three regrets. Nine persons (9 percent) reported having no regrets and one person reported having regrets but was not willing to disclose any details.

5.1 Personal Responsibility and Repeated Regrets

Results clearly showed that the majority of regrets experienced involved a sense of personal responsibility, as rated by the two coders. Over 97 percent of the regrets reported were coded with the participants being personally responsible for their regrets, while only 2.8 percent were coded as being outcomes that were caused by circumstances beyond the person's control. These results clearly indicate that the participants regard personal responsibility to be an important aspect of regret.

From the content of the regrets listed there was also evidence that a number of people experienced regret for repeated actions/inactions, despite being aware of the outcome of their decision. Some of these regrets included, regrets for continuing bad behaviours (for example: "I regret smoking cigarettes"), ongoing personality traits (for example: "I regret not being able to express myself well in times of stress"), motivational issues (for example: "I regret that I don't seem to have the energy and enthusiasm to do anything about my lack of qualifications") and discipline issues (for example: "I regret a personal lack of discipline in saving financially for retirement"). Thus, from the regrets listed by this population sample, the experience of regret is clearly not restricted to isolated events. Certain circumstances can cause a person to regret an action, or a failure to act, that is repeated many times over.

5.2 Regrets of Action and Inaction

All regrets listed by the participants were coded into either action or inaction categories. Action regrets were defined as, "Any regret that is the direct result of an action taken". Some regrets in this category included: "I regret stealing money from my father", "I regret getting married at such a young age", and "I regret becoming an

alcoholic of sorts". Inaction regrets were defined as, "Any regret that is the direct result of an action foregone". Some regrets in this category included, "I regret not travelling before I had kids", "I regret not continuing through university", and "I regret not being able to control my obesity". Of the total number of regrets, 90 (41.9 percent) of these were regrets of action, 116 (54 percent) were regrets of inaction, and 9 (4.1percent) of these were too ambiguous to distinguish between regrets of action or inaction. The difference between the total number of action and inaction regrets was tested for significance using a Chi-square test. Results from this test showed that the difference was not significant, χ^2 (1, n=206) = 3.28, p=.07.

To test the hypothesis that participants will report more regrets of inaction than action, a Wilcoxon Signed Ranks Test was conducted. Results showed that on average the participants reported slightly more regrets of inaction than action, however this difference was not found to be significant, $z = -1.83$, $p = .07$. This non-significant result was shown to occur equally for both men and women, as well as for all ages.

The numbers of *important* action and inaction regrets were also compared to see whether participants had more important regrets of inaction than action. The results showed that overall there was very little difference, with 42 (46.2 percent) of the important regrets being actions, and 45 (49.5 percent) of the important regrets being inactions. Four (4.3 percent) of these important regrets were too ambiguous to distinguish between action and inaction. Thus overall the results from this section suggest that people experience action and inaction regrets with similar regularity, and that important regrets are just as likely to be the result of an action as inaction.

5.3 Temporal Pattern of Regret

In order to test the prediction that, "Regrets of the shorter term are more commonly regrets of action and regrets from the longer term are more commonly regrets of inaction", the participants recorded the number of years that had passed since they first experienced their important regret. The researchers then categorised the responses according to whether the regret had been an action or inaction, and calculated the mean number of years that had passed. These mean values were compared to see whether action regrets had occurred more recently than inaction

regrets. The results of this comparison showed that there was a difference in the mean number of years for action and inaction (see Table 1). A Mann-Witney U test showed that the mean number of years for action regrets was significantly lower than the mean number of years for inaction regrets, $z = -3.46$, $p<. 001$. Thus regrets of action had occurred more recently than regrets of inaction, which tended to be in the more distant past. These results help to support the theory that there is a temporal pattern to the experience of regret.

Table 1 *The Means, S.D.'s and Mean Differences for Important Action Regrets, Important Inaction Regrets, Interpersonal Regrets and Non-Interpersonal Regrets, Showing 'How Long Ago' and 'How Long After' These Regrets Occurred.*

	How long ago (in years)		How long after (in years)	
	Mean	SD	Mean	SD
Inaction Regrets	11.5	10.87	4.6	6.12
Action Regrets	5.9	6.75	1.7	3.0
Mean Difference	5.6***		2.9**	
Interpersonal Regrets	N.A.		4.1	5.82
Non-Interpersonal	N.A.		2.1	3.58
Mean Difference			2.0 (n.s.)	

Note: ** p< 0.01   ***p< 0.001   (n.s.) not significant

In another question, the participants also recorded the number of years that had passed before they began to feel regret for their decision, i.e. 'how long after'. Again the responses were separated out into two groups depending on whether they were action regrets or inaction regrets. The mean numbers of years were then compared, in order to test the hypothesis that action would cause a person to regret their mistake sooner after the event than inaction. A Mann-Witney U test was used to compare these 'how long after' means for both action and inaction. This analysis showed that actions did cause the participants to experience regret significantly sooner than did inactions, $z = -2.88$, $p<.01$ (see Table 1). Thus it seems that it takes longer for a person to experience regret for inaction than for action. It may in fact be this difference in the characteristics of action and inaction regrets that causes the

'temporal pattern' (instead of the current theory of Medvec and Gilovich (1995), which claims that action and inaction regrets change in intensity over time).

A further comparison was designed to test whether situational factors can influence when action and inaction regrets are experienced. This was tested by investigating whether an interpersonal regret (i.e. any regret directly involving another person) causes a person to feel regret sooner after their decision, than a non-interpersonal regret (i.e. any regret that does not directly involve another person). All the *important* regrets were coded into categories of 'interpersonal regrets' or 'non-interpersonal regrets'. The overall mean times (measured in years) for these two groups were then calculated. These times represented 'how long after' the participant's decision that feelings of regret had commenced. The results showed that interpersonal regrets were 'regretted' sooner after the participants' decision, than were non-interpersonal regrets (see Table 1). However a Mann-Witney U test indicated that this time difference between interpersonal and non-interpersonal regrets was *not* significant, $z = -1.83$, $p=.07$. Thus interpersonal regrets did not cause the participants to regret their decisions any sooner after the event than non-interpersonal regrets did.

Overall the results from this section have provided some evidence that there is a temporal pattern to the experience of regret. That is, actions may generate more regret than inactions in the short-term, but as time passes the intensity of action regrets diminishes sharply, and inactions are regretted more than actions in the long run. However another mechanism has been suggested that may account for this pattern of regret. People may only be aware of the consequences of their inactions much later than their actions and so in the short term may not regret them. As time passes the consequences of their inactions become apparent and so they feel regret for them. Thus it may be this difference in how long it takes to experience regret that accounts for the pattern, not the intensity of regret changing over time.

5.4 Emotional Profiles for Regret

In this section the important regrets of action were compared with the important regrets of inaction, to investigate whether they evoked different emotions. Participants were asked to rate, on a five-point scale, how often their important regret

made them 'feel' 15 different emotions. Thus a score between 1 and 5 was recorded for each emotion. Five of these emotions made up a *hot* emotions cluster, five made up a *wistful* emotions cluster, and five made up a *despair* emotions cluster. An overall score was recorded for each cluster by calculating the mean value of the five emotions in each cluster (i.e. the total score from each cluster of emotions, divided by five). Finally the population mean scores for each cluster were compared to see whether the mean scores were different for action and inaction regrets.

In the original research conducted by Gilovich, Medvec and Kahneman (1998), participants were tested to see wether action and inaction regrets differed systematically in the type of emotion they elicited. Their results found that regrets of action were associated more with *hot* emotions, while regrets of inaction were associated more with *wistful* and *despair* emotions. Thus in the present study the hypothesis was, "That regrets of action would more frequently evoke *hot* feelings than regrets of action and conversely regrets of inaction would more frequently evoke *wistful* and *despair* feelings than regrets of action".

In order to identify whether there were different emotional profiles for regrets of action compared with regrets of inaction, three separate *t*-tests for *hot*, *wistful*, and *despair* emotions were conducted. Table 2 shows the population means, standard deviations and *t*-scores of the three emotion clusters, for both important action and important inaction regrets. The results confirm that the *hot* emotions (e.g. angry, disgusted, embarrassed, guilty, irritated) were rated significantly more frequently for action regrets than they were for inaction regrets, $t(88) = 4.45$, $p<.0001$. A small difference in the frequency of *wistful* emotions (e.g. contemplative, dreamy, nostalgic, sentimental, wistful) was found between action regrets and inaction regrets, however this difference was not significant, $t(88) = -1.45$, $p=.151$. Likewise, *despair* emotions (e.g. empty, helpless, longing, sad, unfulfilled) were also not rated significantly more for action regrets than they were for inaction regrets, $t(88) = 1.44$, $p=.89$. Thus overall these results show that action regrets more commonly evoke *hot* feelings, than do regrets of inaction.

Table 2. *The Population Means, S.D.'s, and t-Scores of the Three Emotion Clusters, for Important Action and Important Inaction Regrets.*

	Hot Emotions		*Wistful* Emotions		*Despair* Emotions	
	Mean	SD	Mean	SD	Mean	SD
Action Regrets	2.54	0.83	1.87	0.75	2.11	0.91
Inaction Regrets	1.79	0.73	2.10	0.68	2.08	0.80
t-Score	4.45***		-1.45 (n.s.)		1.44 (n.s.)	

Note: ***p<.0001   (n.s.) not significant

To test the difference between the *hot*, *wistful* and *despair* emotion scores for the important action regrets and important inaction regrets, two separate Friedman non-parametric tests were conducted. For action regrets a significant difference was found between the frequency ratings of *hot* emotions (Mean rank = 2.45), *wistful* emotions (Mean rank = 1.67) and *despair* emotions (Mean rank = 1.88), χ^2 (2, n=41) = 14.65, p=.001. This result indicates that for action regrets, *hot* emotions are rated more frequently than both *wistful* and *despair* emotions. Also for inaction regrets a significant difference was also found between the frequency ratings of *hot* emotions (Mean rank = 1.61), *wistful* emotions (Mean rank = 2.20), and *despair* emotions (Mean rank = 2.19). Both the *despair* and *wistful* emotion scores were significantly higher for inaction regrets than they were for action regrets, χ^2 (2, n=45) = 10.81 p<.005. Overall, once again these results lend support to the theory that action and inaction regrets have differing emotional profiles; *hot* emotions are more commonly associated with action regrets, whereas *wistful* and *despair* emotions are more commonly associated with inaction regrets.

5.5 The Content of Regret

<u>All regrets listed</u>

The aim of this section was to investigate the most common areas of regret and see whether there were any age or gender differences in the content of regrets reported. The data in this section was generated by asking the participants to list up to three regrets they had experienced (see Appendix B). These regrets were then coded into content categories by the researcher and another 'blind' coder. There were 13

different content categories available and the two coders placed each regret into the most suitable category.

Table 3 displays the content categories and the percentage of total regrets in each category as well action/inaction differences within each category, gender differences over all categories and the mean age for each category. A total of 215 different regrets were listed from all content categories by 91 of the participants. Nine participants listed having 'no regrets' and one failed to report any regrets. Two people failed to provide their age and one person did not indicate his or her gender.

Overall, the most common regret category was *Intimate Relationship,* which made up 16.3 percent of all the regrets listed. Within this broad category four specific themes emerged, including, regrets concerning sex (for example: "I regret having sex before I met my fiancé"), regrets about marriage (for example "I regret marrying as young as I did"), regrets involving 'affairs' (for example: "I regret cheating on previous relationships with other guys"), and regrets about the way people had treated their partners (for example: "I regret being awful to my ex-boyfriends").

Table 3. *The Regret Content Categories Showing the Percentages of Regrets Overall, for Action or Inaction, Gender and Mean Age.*

Regret content	Overall	Action Regret	Inaction Regret	Men Overall	Women Overall	Mean Age
Educational	10.2	3.3	16.4	2.2	12.0	33.1
Occupational	3.3	1.1	4.3	4.3	3.0	35.8
Family	11.6	8.9	12.9	12.8	11.4	32.9
Intimate R/ship	16.3	25.6	8.6	19.1	15.6	31.7
Friendships	8.8	10.0	8.6	8.5	8.9	27.2
Health/Self-care	7.9	13.3	4.3	8.5	7.8	30.2
Self-Trait	8.4	6.7	9.5	10.6	7.8	28.4
Financial	5.6	7.8	4.3	4.3	6.0	32.6
Leisure	7.0	0	12.9	12.8	5.4	28.4
Travel	4.2	2.2	6.0	0	5.4	31.6
Dual	4.2	5.6	3.4	4.3	4.2	38.4
Other	12.6	15.6	8.6	12.8	16.2	36.2
N	91	91	91	23	67	89
No. of regrets	215	90	116	47	167	215

Note. The percentage figures were calculated relative to the total regrets listed for each group. The categories *Spiritual/Religious* and *Temporal* were not included in the results due to very low percentage frequencies. A new content category *Travel* was created to include regrets involving travel.

Another common category incorporated regrets about *Family* (11.6 percent). Some reoccurring regret themes within this category included, missed opportunities of spending time with deceased relatives (for example: "I regret not finding out more about my mother and her thoughts/history before she died"), and regrets concerning the way people had spoken or acted towards members of their family (for example: "I regret treating my parents so badly when I was a teenager"). *Educational* regrets were also fairly common (10.2 percent). The majority of the regrets in this category were for missed educational opportunities (or example: "I regret not staying in school and going to university when I was younger"). Interestingly, all but one the regrets that were in the *Dual* category were either made up of family or intimate relationship issues or both. This emphasises again that these two topics are a common source of regret for people. The *Other* category also had a fairly high percentage, indicating that a substantial number of regrets were too ambiguous to be placed in any of the specific categories. The remaining eight categories had a fairly even percentage distribution ranging from 3.3 percent (*Occupational* regrets) through to 8.8 percent (*Friendships* regrets).

Of the 215 regrets, 83 were interpersonal regrets (i.e. any regret that directly involves another person). A total of 69 percent of the participants reported at least one interpersonal regret, with 15.4 percent reporting two interpersonal regrets, and 3.3 percent reporting three interpersonal regrets. It is also interesting to note that the two most common content categories in this study were *Intimate Relationships* and *Family*, which are both categories of regret that involve other people (i.e. categories of an interpersonal nature). These results indicate that regrets that involve other people are very common.

Action and Inaction comparisons

The comparison of the frequency percentages for action and inaction regrets within these content categories shows that some percentages were higher for inaction regrets than for action regrets (see Table 3). The percentage of *Educational* regrets that were inactions was fairly high at 16.4, whereas the percentage of *Educational* regrets that were actions was much lower at 3.3. A Chi-squared test confirmed that this difference was highly significant, χ^2 (1, $n=22$) = 11.6, $p<$ .001. Likewise, the percentage of *Leisure* regrets that were the result of inaction was moderately high

(12.9), but there were no *Leisure* regrets that had been the result of actions, χ^2 (1, n=15) = 15, p< .0001. A number of other categories of regret (such as *Family, Self-trait,* and *Travel*) also showed inactions to be more common than actions, however these differences were not found to be significant.

Conversely, some content categories had higher percentages for action than for inaction. The percentage of action regrets indicated that over a quarter (25.6 percent) were for *Intimate Relationships*, while only 8.6 percent of inaction regrets were for this category. Chi-squared tests showed that this difference was significant, χ^2 (1, n=35) = 5.1, p< .05). Similarly, a higher percentage of action regrets than inaction regrets was found for the category *Health/Self-care*. However, this difference was not significant. For the remaining seven categories (*Occupational, Friendships, Self-Trait, Financial, Travel, Dual* and *Other*), the percentages for action and inaction regrets were similar.

Men and Women comparisons
Table 3 also compares the frequency percentage differences of men and women's regret, within each content category. Some gender differences were hypothesized in the content of regrets reported, but no specific predictions were made as to what form these differences might take. Most of the percentages were similar across all categories, with the exception of *Educational, Leisure* and *Travel*. Women cited *Education* as regret more often then men, whereas men cited regrets of *Leisure* more often than did women. Also, regrets of *Travel* were only cited by women (5.4 percent); men had no regrets in this category. These findings emulate results reported in previous research (e.g. Metha, Kinnier & McWhirter, 1989; Lecci, Okun & Karoly 1994, which also found that women had more educational regrets and men had more regret about not spending enough time doing leisure activities).

Age comparisons
The mean age for each regret content category was calculated to see whether there were any age differences between content categories (see Table 3). Some age differences were hypothesized in the content of regret reported although it was not predicted what these differences might be. The mean ages ranged from 27.2 years (*Friendships* category), through to 35.8 years (*Occupational* category), indicating

that there was very little age difference in the content of regrets for this population[7]. Overall, differences in regret content do not appear between different-aged people.

Important regrets only

Table 4 displays the content categories and percentages for just the important regrets listed in each category. It also provides action/inaction differences within each category, gender differences over all categories and the mean age for each category. A total of 91 important regrets were recorded in the content categories, from the 91 participants. Of these 91 regrets, four were too ambiguous to be classified as action or inaction. As in with the table above, two participants failed to provide their age, and one person did not identify his or her gender.

When compared with results in Table 3, the results in Table 4 do show some similarities. Similar to the overall results, the most common important regrets were also *Intimate Relationship* regrets with almost 20 percent of the participants listing them. Some examples from this category included, "I regret marrying as young as I did", "I regret being selfish with my last girlfriend, breaking up with her and treating myself badly", and "I regret that I didn't stay a virgin till I got married". Likewise *Family* was again a fairly common subject of important regrets. Examples included, "I regret not seeing my grandad more before he died and for not introducing my boyfriend to him" and "I regret not participating in my younger brother's life and getting to understand him until recently". Over half of the important regrets in the *Dual* category were again made up of family and intimate relationship regrets, thus re-emphasising the common nature of these regret categories. Some *Dual* regret examples were, "I regret that I wasn't more thoughtful to my friends and parents when I was growing up", and "I regret the break-up of my first marriage and the effect it had on my family, my wife's family, children and friends". Again like Table 3, the *Other* category in Table 4 also had a high percentage, indicating that a substantial number of important regrets were ambiguous for this population.

---

[7] Note: The mean age for the *Dual* and *Other* categories are not relevant in this comparison, because they do not specify a specific category.

Table 4. *The Regret Content Categories Showing the Percentages of Important Regrets, for Action or Inaction, Gender and Age.*

Regret content	Overall	Action	Inaction	Men Overall	Women Overall	Mean Age
Educational	7.6	4.8	11.1	8.7	7.5	40.7
Occupational	3.3	0	6.7	0	4.5	37.0
Family	10.0	4.8	13.3	13.0	9.0	32.9
Intimate R/ship	18.7	30.1	6.7	17.4	19.4	30.9
Friendships	7.6	9.5	6.7	4.3	9.0	29.0
Health/Self-care	10.0	19.0	2.2	17.4	7.5	26.6
Self-Trait	8.8	2.8	15.6	17.4	5.9	24.0
Financial	4.4	4.8	4.4	0	5.9	28.5
Leisure	5.5	0	11.1	4.3	5.9	29.6
Travel	2.2	2.8	2.2	0	3.0	26.5
Dual	5.5	9.5	2.2	4.3	5.9	36.4
Other	16.5	11.9	17.8	13.0	16.4	41.4
N	91	42	45	23	67	89
No. of regrets	91	42	45	23	67	89

Note. The percentage figures were calculated relative to the total important regrets listed for each group.

By focusing on just the important regrets a few differences were noted between Table 3 and Table 4. There were a higher percentage of *Health/Self-care* regrets in Table 3 than in Table 4. This indicates that although the *Health/Self-care* category was not very common overall, it was a fairly common important regret. In contrast, *Educational* regrets were not as common in Table 3 as they were in Table 4. This suggests that while *Educational* regrets are fairly common, they are less often important regrets. The remaining important regrets were fairly evenly distributed among the other categories. The percentages for these categories ranged from 2.2 percent *(Travel)* through to 8.8 percent *(Self-trait)*. A total of 40 of the 91 important regrets listed by the participants were interpersonal regrets, re-emphasising that many important regrets directly involve other people.

Action and Inaction comparisons

A number of differences between important action and important inaction regrets were also found within some of the content categories. For the regret category *Self-Trait* inaction regrets were significantly more frequent than action regrets, χ^2 (1, *n*=8) = 4.5, *p*<.05. Similarly for the regret category *Leisure* a number of inaction regrets were listed, whereas zero action regrets were listed. This difference was significant, χ^2 (1, *n*=5) = 5.0, *p*<.05. Conversely, for the categories *Intimate Relationship* and

Health/Self-care higher percentages were found for action regrets than for inaction regrets. Chi-squared tests confirmed that regrets of *Intimate Relationship* more frequently involved actions than inaction and that this difference was significant, χ^2 (1, $n=16$) = 6.25, $p<.05$. Similarly, there were significantly more *Health/Self-care* regrets that involved action, than inaction, χ^2 (1, $n=9$) = 5.44, $p<.05$.

Men and Women comparisons

The percentage frequencies in Table 4 for men and women also showed that there were some content differences between these two groups in terms of important regrets. Some differences were hypothesised in the regret content between men and women; however no particular differences were specified. These gender differences in the content of important regrets were more pronounced than the gender differences for all regrets listed. This indicates that although men and women share similar regret experiences, their most important regrets can be quite different. For *Occupational, Financial* and *Travel* regrets women made up all the percentage numbers. Regrets from these three categories included: "I regret not coming over to live in New Zealand sooner" (*Travel*), "I regret not being able to save money and spending everything I have almost as soon as I get it" (*Financial*), and "I regret not exploring career options suitable for me and just doing a job" (*Occupational*). Interestingly, men had no important regrets in these categories. However men did have more important regrets of *Family, Health/Self-care* and *Self-Trait* relative to women. Regrets from these categories included, "I regret smoking cigarettes" (*Health/Self-care*), "I regret that I didn't learn to honour and obey my parents earlier in my life..." (*Family*), and "I regret being too passive and non-proactive previously" (*Self-Trait*).

Age comparisons

The mean age for the content categories of important regrets showed some differences, although like the results in Table 3, these differences were fairly minimal. Age differences were hypothesised in the content of important regrets; however no specific differences were specified. The categories *Self-Trait, Health-Care,* and *Travel* had the lowest mean ages (24.0, 26.6 and 26.5, respectively), indicating that regrets of this nature are more common amongst a younger population. *Education* and *Occupation* had the highest mean ages (40.7 and 37,

respectively), indicating that an older population experiences these regrets more frequently.[8]

5.6 The Role of Regret and Life Satisfaction

In section 2 of the questionnaire, the participants were asked a number of questions about their regrets in general. Each question was made up of a five-point scale, which measured a different area of regret. These five areas were the number of regrets, the intensity of regrets, the frequency of regret thoughts, the impact of regret and the type of regret impact. Table 5 provides a summary of the mean scores and standard deviations for each measure of regret. The table also shows the correlation values between the three life-satisfaction measures (i.e. GWB, Life-scale and Affectometer 2) and the scores on the five measures for regret.

Table 5. The *Results for the Five Measures of Regret, Showing the Mean Values, S.D.'s and Correlations with the Three Life-Satisfaction Scales (GWB, Life-scale & Affectometer 2).*

Measures	Mean Score	SD	Correlation Scores with Life Satisfaction		
			GWB	Life-scale	Affectometer 2
Number of Regrets	2.36	1.26	-0.35**	-0.40**	-0.43**
Intensity of Regrets	2.29	1.06	-0.23**	-0.48**	-0.46**
Frequency of Regret thoughts	2.46	0.84	-0.43**	-0.52**	-0.55**
Impact of Regrets	3.02	1.02	-0.33**	-0.57**	-0.51**
Type of Regret Impact	3.15	0.14	0.24*	0.23*	0.34**

Note: ** $p<0.01$ *$p<0.05$

Number of Regrets

Results showed that for the question "In general how many regrets about the past do you have?" 31.5 percent of the participants reported having *very few regrets*, 31.5 percent reported having *some regrets*, and only 12 percent reported having *many regrets*. The mean value (2.36) indicated that on average the participants had between *few* and *some* regrets in their lives (see Table 5). The scores on this scale were also correlated with the scores on the three life satisfaction measures, using

---

[8] Note. Again the *Dual* and *Other* categories were not considered, because they do not specify a particular category

Pearson's *r*. This was used to test the prediction that, "People who have more regrets will be less satisfied with their lives than people who have fewer regrets".

Results showed that the number of regrets was significantly negatively correlated with all three measures of life satisfaction (see Table 5). These correlations indicate that in general, people who report having more regrets are less satisfied with their lives.

Intensity of Regrets

In reporting the intensity of their regrets in general, 23.9 percent of the participants had *not very intense* regrets, while 40.2 percent had between *not very intense* and *moderately intense;* 22.9 percent reported having *moderately intense* regrets and only 4.3 percent had very intense regrets. The mean score for the intensity of the participant's regrets in general (2.29) indicates that on average most people rate the intensity of their regrets as *not very intense* or *moderately intense* (see Table 5). To test the hypothesis that, "People who rate their regrets as more intense will be less satisfied with their lives than people who rate their regrets as less intense", scores on the intensity scale were correlated with scores on the three life satisfaction measures.

Using Pearson's *r*, the results showed that the intensity of regrets was significantly negatively correlated with life satisfaction, on all three measures (see Table 5). Thus if a persons has more intense regrets, they are likely to be less satisfied with their life, than someone who has less intense regrets.

Frequency of Regret thoughts

In response to the question "In general how often do you think about the regrets in your life?" 1.1 percent of the participants chose *not at all*, 68.5 percent chose *occasionally,* 16.3 percent chose *some of the time*, 12 percent chose *often,* and 2.2 percent chose *all the time*. The mean score from this population (2.46), indicated that on average people think about their regrets *occasionally* or *some of the time* (see Table 5). The scores from this regret frequency scale were then correlated with scores from the three life-satisfaction measures to test the hypothesis that, "People who think about their regrets more often will be less satisfied with their lives than people who think about their regrets less often".

Using Pearson's *r*, results showed that increased thinking about regrets was significantly negatively correlated with life-satisfaction on all three measures (see Table 5). These results strongly suggest that increased thinking about ones regrets is related to a lower life satisfaction.

Impact of Regrets

When asked about the general impact of regrets in their lives, the participant's responded with, 1.1 percent reporting *no impact,* 37.0 percent reporting *a small impact,* 30.4 percent reporting *a moderate impact,* 21.7 percent reporting *a large impact,* and 9.8 percent reporting *a very large impact.* The mean score for this scale (3.02) indicted that on average the participants rated their regrets as having *a moderate impact* on their lives (see Table 5). The impact scores from this scale were then correlated with the scores from the three life-satisfaction scales. This was to test the hypothesis that, "People whose regrets have had a larger impact in their lives will be less satisfied with their lives than people whose regrets have had a smaller impact in their lives".

Pearson's *r* showed that the size of the regret impact was significantly negatively correlated with all three life-satisfaction measures. The correlation between the 'regret impact' score and the *Life-scale* score (of –0.565) was the highest out of all the correlation scores (see Table 5). Overall, this indicates that the impact of regrets has a strong influence on ones life satisfaction: The greater the impact of regrets in a person's life, the lower their life satisfaction is.

Type of Regret Impact

Participants were asked a question about the overall *type* of impact regret has had in their lives: 5.4 percent answered *entirely negative impact,* 15.2 percent answered *mostly negative impact,* 43.5 percent answered *equally negative and positive impact,* 30.4 percent answered *mostly positive impact* and 5.4 percent answered *entirely positive impact.* The mean score for this scale was 3.15 (SD=0.94) indicating that in general most people report their regrets as having had *an equally negative and positive impact* or a *mostly positive impact* (see Table 5). This shows that although initially regret might be painful, it does have a functional value, which can be used towards a more positive outcome.

The participant further elaborated on their answers to this scale, by explaining *why* they thought their regrets had had that sort of an impact in their lives. The main themes were extracted from the participants' explanations and grouped together, depending on the type of impact that had been selected (For example: If a participant had chosen *entirely negative impact* on the scale, then the theme from their explanation would be grouped with themes from other participants who had also chosen *entirely negative impact*). Thus these themes were used to help understand the coping mechanisms people used by people to deal with the impact of their regrets.

For the participants who selected *entirely positive impact* or *mostly positive impact* most of them described their regrets as having been an important learning experience. Although these people had made mistakes that had caused regret in the past, the experience of their regrets had helped them to make better decisions in the future, and to avoid making the same mistakes again (and therefore experiencing more regret). Others commented that their regrets had helped them mature, to grow in wisdom, to improve their personal traits (such as learning self-control), and also to learn more about themselves and their reasons for doing things. Overall regret impacts had been positive because they had inspired some participants to make the most out of life, opportunities and time with friends and family. Regrets had also spurred people on make amends for their regrets, helped them to learn better ways to approach things so that they could pass this knowledge onto others, and to help understand other people who have also made similar mistakes.

The participants, who rated the overall impact of their regrets as having an *Equally Negative and Positive Impact*, generally described their regrets as having a negative impact at first, but that positive things had later arisen from the regret situation. The initial 'negatives' of their regrets included feeling bad/negative, becoming a 'victim' to their regrets, facing set-backs as a result of their mistakes and asking "what if?" questions about their lives. However the participants' regrets also had a positive impact on their lives as well. Some of these 'positives' included learning from their regrets so that they didn't make the same mistakes again. Learning from their regrets had also helped them to move on with their lives in a new positive direction. Regret helped the participants to gain experience, to become stronger/more mature and to

help prevent others (such as friends and family) from making the same mistakes in the future. Therefore the overall impact was a combination of both positive and negative aspects.

Those participants who described their regrets as *Mostly Negative Impact* or *Entirely Negative Impact* gained very little, if any, positive experiences from them. These feelings had often arisen, because the participants had not been able to deal with their regrets or learn from their mistakes. This has meant that they had repeated the same mistakes, so that regret continued to affect them in a negative way. A number of the participant's continued to dwell on the lost opportunities of their regrets, and didn't see their regrets as having motivated them to change, or having had any use at all. Thus, because they were not able to use their regrets in any functional way, the overall impact was a negative one.

The scores from the *Type of Impact* scale were also correlated with the three life-satisfaction scales to examine the hypothesis that, "People who report regret as having a more negative impact on their lives are less satisfied with their lives". The correlations were calculated using Pearson's r, and the results showed that the type of impact was significantly *positively* correlated with all three life-satisfaction measures (see Table 5). These positive correlation values (between 'impact type' and the life satisfaction measures) were somewhat lower than the correlations with other measures of regret. However, these correlations still indicate that if a person can use their regret experience in a positive way, they are likely to be more satisfied with their life, than a person who only sees their regrets as being entirely negative.

5.7 People with No Regret

As mentioned in an earlier section, nine of the participants (8.9 percent) reported having no regrets in their lives. These participants were asked in the questionnaire to explain why they have no regrets. These explanations were then analysed by the researcher to see what steps these people took to prevent situations from becoming regrets. All of the participants on this 'no regrets' group, acknowledged that they had made mistakes in their past, however nearly all of them had accepted these mistakes and learned from them. The participants also tried to deal with all their mistakes as soon as they happened, so that once they had accepted them, they were able to leave them in the past. Some of the participants did admit that they had

experienced regret in the past, but had dealt with these regrets quickly so that they no longer affected them in the long run. These past regret experiences had also helped them to avoid making the same mistakes again in the future. Therefore it seems that by accepting ones mistakes and learning from them, as well as dealing with any regrets as soon as they are experienced, one can avoid feeling regret in the long term.

The Relationship Between Regret and Life Satisfaction

Although some of the participants reported having no regrets in their lives, the researchers were interested in finding out whether these people were also more satisfied with their lives, than the participants who reported having regrets. The relationship between regret and life satisfaction was further investigated by comparing the mean life satisfaction scores of those participants who reported having regrets ('regrets'), and those who reported having no regrets ('no regrets'). If regret had a negative impact on life satisfaction, then participants in the 'no regrets' group were expected to have greater life-satisfaction than those participants in the 'regrets' group.

The results from this comparison showed that, on average, the 'no regrets' group had higher mean scores on all three life satisfaction scales than the 'regrets' group. Three Mann-Whitney U tests were conducted to see whether these differences were significant. The *GWB-scale* showed that there was no significant difference in life-satisfaction score between the 'regrets' group (M=5.75; SD=1.33) and 'no regrets' group (M=6.13; SD=0.48), $z = -1.85$, (p=0.065). However for the *Life-scale* a significant difference was found, with the 'regrets' group having a significantly lower score (M=5.05; SD=1.26) than the 'no regrets' group (M=5.88; SD=0.64), $z = -1.98$ (p<0.05). An even stronger significant difference was found using the *Affectometer 2* scale, with the 'regrets' group having a much lower mean life-satisfaction score (M=1.74; SD=1.09) than the 'no regrets' group (M=3.10; SD=0.51), $z = -3.75$ (p<0.001). Thus on two of the measures, the overall experience of regret was shown to be associated with a lower life satisfaction. This suggests that people who are able to fully deal with their mistakes and bad decisions and prevent them from becoming regrets, are likely to be more satisfied with their lives, than those people who have regrets about their past.

Overall, the results from the previous two sections have shown that regret is quite strongly associated with life satisfaction: People who have regrets are less satisfied with their lives than people who have no regrets. Those people who have used their regret experiences functionally and who have gained some positive aspects from their experiences, are also more satisfied with their lives than those people whose regrets are a negative experience. The level at which a person experiences regret also has a relationship with their life satisfaction. People who have more regrets, rate their regrets as more intense, think about their regrets more often, and whose regrets have had a large impact on their lives, are generally less satisfied with their lives.

Having outlined the results of the present research, the focus will now move to examine these results in more detail. The next chapter will discuss these results in-depth, providing an interpretation of the findings and outlining the implications of what these results mean.

CHAPTER SIX

Discussion

The following chapter discusses the results from chapter five in more detail and outlines the implications of these results. The support of hypotheses of the research will be discussed, and references will be made to the results found in previous research. The final part of this chapter includes the limitations of the present research and the overall conclusions of the study.

6.1 Personal Responsibility

Results from the study showed that an overwhelming majority of the regrets listed (97.2 percent) included aspects of personal responsibility for the outcome. This clearly supports the hypothesis of the study that claimed, "Participants will mostly report regrets in which they have been responsible for the outcome". This finding is consistent the results of Gilovich and Medvec (1994), who found that over 93 percent of the regrets reported in their study involved circumstances where the respondent was responsible for the outcome. Both of these results offer support for the argument that responsibility is the *determining* factor of regret and should therefore help define it from other emotional states (e.g. Zeelenberg, van Dijk & Manstead, 2000). Even the few cases in the present study where the regret explanation was too abstract to define (and labelled as 'non-responsible' regret), the respondent still placed the emphasis of responsibility on themselves. This supports the Zeelenberg, van Dijk and Manstead (2000) claim that even in situations where it may seem impossible for a person to be responsible for their regret (E.g. I regret I was too unattractive to find a partner), they may still feel some responsibility for the outcome.

Other researchers have argued that although personal responsibility does heighten feelings of regret, it is not a necessary component (e.g. Landman 1993). However by studying people's experiences that have lead to regret, the present research has clearly demonstrated that personal responsibility *is* a necessary component of regret. Personal responsibility should be incorporated in the definition of regret. A definition that incorporates personal responsibility is offered by Zeelenberg (1996, p.6, cited in Zeelenberg van Dijk & Manstead, 1998). It states, "Regret is a negative

cognitively determined emotion that we experience when realizing that our present situation would have been better had we acted differently". Within this definition is the understanding that regret is the direct result of a 'wrong' decision, and that the decision maker is responsible for the outcome (Zeelenberg, van Dijk & Manstead, 1998).

6.2 Regret for Repeated Decisions

Results from the study found evidence that people can have regrets for events that they are going to repeat in the future, even though they know the consequences of their decisions. These regrets included continuing bad behaviours, ongoing personality traits, motivational issues and discipline issues. Some researchers have argued that regret should only be used to describe feelings that are associated with events that a person would not repeat in the future (e.g. Hampshire 1960, cited in Gilovich & Medvec, 1995). However as the present study has shown, in certain situation a person may make the same mistakes in the future even though they know the consequences of their actions/inactions in advance. The participants, who described their regrets as having '*a negative impact*', explained that although they knew what caused their regrets, they were often unable to learn from them and so continued to have repeated their mistakes. Thus from this evidence, if someone is unable to deal appropriately with a situation or behaviour that caused them to regret, they are likely to make the same mistake again.

6.3 Regrets of Action and Inaction

A total of 215 different regrets were listed by the participants of the present study, with 90 of these regrets actions and 116 inactions. This difference between the number of action and inaction regrets, however, was not found to be significant. Also on average there was no significant difference in the number of action and inaction regrets that each participant reported. That is, each person was just as likely to report a regret that was the result of an action, as they were to report a regret that was the result of inaction. When the researcher focused just on the *important* regrets of the study, the results showed that number of action and inaction regrets were almost identical (with 42 action and 45 inaction regrets). These results were unexpected and do not support the hypothesis that, participants would report more

regrets of inaction than action, and that participants would also rate regrets of inaction as more significant in their lives than regrets of action.

These results are not consistent with previous research, which has found that people experience regret for inactions more frequently than for actions, and that inaction regrets are more significant than action regrets (e.g. Gilovich & Medvec, 1994; Feldman, Miyamoto & Loftus, 1999). These conflicting results may be explained by slight differences in the method used in the present study. In previous research participants have been asked to list their 'biggest' or 'most significant' regrets. In the present study participants were just asked to "list some regrets", and then later to choose their most *important* regret from their list. Thus these *important* regrets may not have been the most important regrets in their lives, just the most important from their list. However, looking at the content of many of the regrets listed, many of the participants have listed regrets that appear to be very important. For example "I regret not completely sorting out my relationship with my father before he died" and "I regret that I overdosed on a cocktail of hard drugs..."

Overall the present research calls into question the claim that regrets of inaction are more frequent and more significant than regrets of action. Both types of regret are experienced with similar regularity, and situational factors are likely to determine whether regrets are the result of an action or inaction.

No gender differences were found, with both male and female participants sharing equal numbers of action and inaction regrets. There was also no evidence of any age differences regarding the number of action and inaction regrets reported. Previous research has also indicated that there is no significant difference in the frequency of action/inaction regrets between younger and older adults (e.g. Medvec & Gilovich, 1995). Further research that focuses more specifically on different age groups with regard to action/inaction regret would help to substantiate these findings.

6.4 Temporal Pattern of Regret

Although no differences were found between the number of action and inaction regrets reported, there was evidence of a temporal pattern. The temporal pattern theory states that "Actions...generate more regret than inactions in the short-term,

but over time the pain of regrettable actions diminishes, whereas regrettable failures to act [i.e. inactions] grows" (Gilovich & Medvec, 1994, p. 360). The present study supported the hypothesis: regrets of the near past were more commonly actions and regrets from the distant past were more commonly inactions. These findings verify previous research, which has also found *some* temporal differences between these two types of regrets. Gilovich and Medvec's (1994) results also showed that action regrets were common in the recent past, but inaction regrets were more common in the more distant past.

Some explanations have been offered by other researchers as to why this temporal pattern occurs. These include mechanisms that reduce the pain of regrettable actions, mechanisms that bolster the pain of regrettable inactions, and factors that promote the cognitive availability of regrettable inactions (Gilovich & Medvec, 1995). Further explanations for this temporal pattern include a 'post-event framing hypothesis' that suggests people try and reduce their accountability for their regrets, the 'spotlight effect' and its influence on peoples actions, and the 'behaviour selection hypothesis' which claims that people suppress their actions more to avoid regret.

In the present study, results suggest another mechanism, which may influence the timing of when people experience regret for actions and inactions. Participants reported on 'how long after' they had made their decision (causing regret), they began to feel regret for that decision. In light of the temporal pattern of regret, actions that result in regret were hypothesised to cause a person to regret their decision *sooner after* the event, than inactions. The results of the research ultimately supported this prediction, showing that actions did cause the participants to regret significantly sooner than inactions, by a difference of nearly three years.

This difference between actions and inaction may also *directly* contribute to a temporal-type pattern for regret. It is possible that in the short-term the consequences of actions are more obvious than inactions. Similarly, the 'cost' of much inaction may not be fully realised until a considerable amount of time has passed. Therefore, even though an action and an inaction may occur at the same time, a person is likely to feel regret for their action sooner than they are for their failure to

act. Other researchers have also noted this discrepancy in how action and inaction regrets are experienced. Zeelenberg, Inman and Pieters (2001, p150) states:

> Unlike action regrets, which typically refer to a decision that took place at one moment in time, inaction regrets are often the result of a retrospective realisation that one wasted an opportunity. Therefore in general it takes us longer to realise that we regret no having acted than it takes us to realise that we regret an action.

Overall, a person may be more aware of their action regrets in the short term than they are of their inaction regrets and so report action regrets as more important. However as time passes and the consequences of their inactions become apparent, they begin to feel regret for them, and report inaction regrets as more important. Therefore the 'temporal pattern' of regret may be the result of actions and inactions having some characteristic differences, not the intensity of regret changing over time.

Some researchers have argued that the action/inaction temporal pattern of regret is too simplistic and that other more specific factors will influence a person's regret experience much more strongly. For example Seta, McElroy and Seta (2001) propose that the desirability and consistency of an outcome influence judgements about regret and often override the temporal pattern of regret. In light of these claims, the present study investigated whether situational factors would influence the time it took a person to feel regret, regardless of whether it was caused by action or inaction. The aim was to see whether interpersonal regrets (those involving another person) would cause a person to feel regret sooner, than a non-interpersonal regret (those involving just the individual).

Results showed that interpersonal regrets were regretted sooner than non-inter-personal regrets, however this difference was *not* significant. Regardless of its significance, this result still adds weight to the argument that situational factors may override the temporal pattern of regret. Further studies that look at interpersonal regrets in more depth would certainly help to clarify this finding. Some ideas are discussed in later sections.

Overall the content of regret and other factors, such as the desirability of regret, how serious the consequences of the regret are, or who was involved within the regret situation, may affect whether the temporal pattern of regret is observed or not. There is still a strong argument for the temporal pattern theory, however at present it is impossible to say whether action and inaction regrets do change their intensity over time, or whether their differences are brought about by other factors (mentioned above). To resolve this uncertainty a longitudinal study needs to be conducted, which directly records people's most troublesome action/inaction regrets at different stages in their life (Gilovich, Medvec & Kahneman, 1998). This would then show whether regrets of action and inaction do in fact change intensity over time. Gilovich and Medvec report they have a longitudinal study in progress, however until results from such studies are available, these issues about regrets of action and inaction will continue to be debated.

6.5 Emotional Profiles of Regret

This section investigated whether action and inaction regrets evoked different types of emotion. Regrets of action were hypothesised to evoke more frequent *hot* feelings than regrets of inaction and conversely, regrets of inaction more frequent *wistful* and *despair* feelings than regrets of action. The results of the study partly supported this hypothesis, finding that *hot* emotions (e.g. angry, disgusted, embarrassed, guilty, irritated) were more frequently experienced for action regrets than for inaction regrets. However, no differences between these regret types were found for *wistful* emotions (e.g. contemplative, dreamy, nostalgic, sentimental, wistful) or *despair* emotions (e.g. empty, helpless, longing, sad, unfulfilled).

Further analysis of the results looked at the action and inaction regrets separately to see what type of emotions each type of regret was likely to evoke. Friedman's non-parametric tests clearly showed that a person who has experienced an action regret, is much more likely to feel *hot* emotions for it than they are to feel *wistful* or *despair* emotions. The tests also confirmed that if someone has experienced inaction regret they are more likely to feel either *wistful* or *despair* emotions for it than they are to feel *hot* emotions. These results are consistent with those of Gilovich, Medvec and

Kahneman (1995), who also found action and inaction regrets differed systematically in the type of emotions they elicited.

Thus it is fairly clear that action and inaction regrets *do* evoke different clusters of emotion. However, what is not clear is what this difference means in terms of the temporal pattern of regret. Kahneman believes that the distinction between types of emotion provides an alternative account to the temporal pattern. He claims that the pattern of action and inaction regrets represents two very different emotions under the same "regret" title, with inaction regrets less painful than action regrets. He also states that there is no evidence for regrets changing their intensity over time (Gilovich, Medvec & Kahneman, 1998). Gilovich and Medvec agree that different regrets do evoke different emotions; however they believe that both action and inaction regrets can be equally painful. They still contend that the intensity of action regrets diminish over time, whereas the intensity of inaction regrets increases (Gilovich, Medvec & Kahneman, 1998). Although support for their theory is largely circumstantial, Gilovich and Medvec are currently conducting a long-term study, which may provide more direct evidence that regrets change intensity over time.

In light of both these views the writer agrees with Kahneman that regrets from different time periods can evoke different types of emotions. However the present research has found that all types of regret can be very painful and therefore generalizations should not be made as to which types of regret are more painful. The writer also agrees with Gilovich and Medvec that some regrets may follow a temporal pattern and change in intensity over time. Overall then it seems plausible to incorporate ideas from both these researchers: For example, there may be a basic temporal pattern for action and inaction regrets with some regrets changing over time. However certain action and inaction regrets may also evoke different emotions, with inactions incorporating more *wistful* and *despair* emotions, and actions incorporating more *hot* emotions. What the research has clearly shown is that regret is very complex and so one particular theory is unlikely to fully explain how it is experienced.

6.6 The Content of Regret

The aim of this section was to look at the content of people's regrets and to see what regrets were the most common and also what regrets were the most important. The researcher (and another associate) coded the regrets that the participants listed in the questionnaire, by identifying the main content domain of each regret. Then each regret was placed into one of 13 different content categories. The number of regrets in each content category was calculated to see which topics were most frequently regretted. This process was then repeated with the important regrets only.

The results from this section showed that when analysing all of the regrets listed, *Intimate Relationship, Family,* and *Education* regrets were the most common types of regrets. When just the participant's important regrets were analysed, the *Intimate Relationship* and *Family Relationship* categories were again the most common, along with *Health/Self-Care* regrets. However, although *Education* was a fairly common regret subject, it was not as often an important regret.

When comparing these results to previous research similarities can be noted. Like the present study, previous studies have found that 'missed education' is a common source of regret in people's lives (e.g. Lecci, Okun & Karoly 1994; Gilovich & Medvec 1994; Kinnier & Metha 1989; DeGenova 1992). Landman and Manis (1992) also found that regrets about intimate relationships was a common source of regret, with over 20 percent of the participants in their study reporting it; regrets about family were also common in their study. Therefore based on the findings of the present study and the results of previous research, *education, family, health/self-care* and *intimate relationships* are common sources of regret.

Although these results seem fairly convincing, they do not offer very detailed information about the experience of regret. The four common categories of regret that were highlighted are so general and between them cover such a wide range of life events; it is hardly surprising that they make up the most common regrets. These four regret topics also cover the areas of life that are generally most important to us (e.g. family relationships) and involve some of the biggest decisions that a person will have to make in their lifetime (e.g. who to marry). Therefore these findings

should be interpreted with these points in mind, and caution should be applied when drawing conclusions.

Interpersonal Regrets

Many of the regrets that the participants reported were found to be interpersonal in nature. Nearly half of all the important regrets listed were regrets that involved another person, and nearly 70 percent of all the participants listed at least one interpersonal regret. This result shows that interpersonal regrets are very common and can often have an important impact in a person's life. This suggests that a person may feel more responsibility (and therefore more regret) for a regret situation that involves another person, because the outcome of their decision not only affects them, but also affects the other person too. No previous research has focussed on the difference in responsibility between interpersonal and non-interpersonal regret, therefore it is difficult to draw any conclusions from the results. More detailed research is needed that focuses on these differences between interpersonal/non-interpersonal regret can be compared. Future research ideas are discussed further in following sections.

Action and Inaction Regrets

Within each of the content categories, the frequency percentages of action and inaction regrets were compared to see whether certain regrets were more typically actions or inactions. Regrets of *Education* were much more frequently inaction regrets than they were actions. Also all the *Leisure* regrets were inactions; there were no action regrets in this content category. These results reveal that people often wish they had spent more time in the past obtaining an education and taking part in leisure activities more. These result are very similar to those of Gilovich and Medvec (1994), who also found that nearly all the educational regrets reported in their study were for inactions, and that *all* of the regrets related to leisure activities were also for inactions. Based on these findings the time spent obtaining an education and participating in leisure activities is arguably valuable in the long run and not considered wasted time.

On the other hand, the findings also showed that *Intimate Relationship* regrets, as well as *Health/Self-care* regrets were much more often caused by inactions than they were by actions. No previous research has found this particular distinction, so it is difficult to suggest reasons why these regrets are most often caused by actions, or to suggest how one might avoid these regrets in the future. Although there may be no obvious explanation for these patterns, overall distinctions can be clearly made between action and inaction regrets.

Gender Differences

In the present study gender differences were hypothesised in the content of regret, however no specific predictions were made. The results from the research support this hypothesis, finding that although the content of both men's and women's regrets were mostly similar there were some differences. Women had more *Education* regrets than men and were the only ones to report regrets of *Travel* (men had no *Travel* regrets). These results are consistent with previous studies, which have also found that women's regrets have focussed more on education than men's (e.g. Stewart & Vandewater, 1999; Metha Kinnier & McWhirter 1989). Interestingly, only women had important regrets about *Occupation* and *Travel*, which is also consistent with previous research (e.g. Stewart & Vandewater, 1999). These differences might reflect social trends, where men have traditionally been given more opportunities to pursue higher levels of education than women (Holahan, Holahan & Wonacott, 1999), and therefore have more opportunities to advance their occupational careers. Women on the other hand have often had to sacrifice both educational advancement and their occupations for family responsibilities, and therefore are more likely to feel regret for these missed opportunities.

Conversely in the present study men cited regrets of *Leisure* more often than women. This result concurs with previous research, which has also reported that men have more regrets about not spending enough time doing leisure activities (e.g. Lecci, Okun & Karoly, 1994). This finding may again highlight the difference in social roles between men and women. Men have traditionally made their careers more of a priority than women, who have often had to place their careers after their families (Lecci, Okun & Karoly, 1994). This has meant that men often spend too much time

at work and not enough time with their families or doing leisure activities (e.g. Kinnier & Metha, 1989). As a result then they are more likely to look back and have regrets for these missed opportunities.

Within many life decisions (such as whether to pursue an important career, or whether to be more family oriented) there are going to be "trade-offs" between the outcomes. A person who decides to make their career their top priority is likely to have more regrets about not spending enough time with friends and family. A person who makes their family a priority and spends more time pursuing their leisure interests is likely to have regrets about not making enough professional achievements. These sorts of regrets are created by counterfactual thinking where a person imagines, "What if I had made another decision...?" This thinking creates regret, because when people imagine an alternative lifestyle to the one they have chosen, it is often a better outcome (Roese, 1997).

To help avoid these counterfactual thoughts it is important to be realistic in the way we view our lives, and realise that all decisions have consequences. Although there are an endless number of imagined paths life can take, in reality there are only a limited number of actual paths. Therefore with every choice a person makes (e.g. deciding to make quality time for family) it means that there will be an alternative consequence to that choice (e.g. not being able to achieve more professionally). Thus a person who is able to accept the choices they have made, is more likely to be content with their lives and have fewer regrets. Further research in this area would be useful to investigate whether a relationship exists between the level of counterfactual thinking and the number of regrets a person has (e.g. Do people who often think "What might have been...?" have more regrets than those who are satisfied with their decisions?).

Age Differences

In this section of the study the aim was to see whether there were differences in the content of people's regrets as they continued to age. Age differences were hypothesised in the content of regrets reported, however no specific predictions were made as to what these differences would be. The mean age for each content category was calculated, to see whether any age differences were associated with specific

types of regret. These mean ages of all the categories ranged from 27.2 to 35.8 years, indicating that there was very little departure from the overall sample mean age of 32.5. Thus the age of the participants was fairly consistent in all of the different areas of regret. A larger age difference was noted when analysis focused only on the *important* regrets. These results showed that regrets of *Self-Trait, Health/Self-care* and *Travel* had the lowest mean ages (24, 26.6 and 26.5, respectively), whereas *Education* and *Occupation* had the highest mean ages (40.7 and 37 respectively).

These results contain ambiguities, as age was not controlled for as a variable. The distribution of ages in the present study was not normal around the mean age of 32.5 years, and there was a high standard deviation of 12 years. There were a much greater proportion of younger participants than older participants, with over half of them under the age of 28 and only 18 people over the age of 47. This uneven distribution makes it difficult to make any conclusions about any age differences with respect to regret content. To test for age differences accurately, an even number of people should be assigned age groups, which have clear and meaningful age distinctions (For example, the age groups "20-29, 35-55 & 64 and older" used by Kinnier and Metha, 1989). Research that has incorporated clear, specific age groups has found that older people have had more regrets about family and friends, whereas younger people have had more regrets of career, ambition leisure and romance (e.g. Lecci, Okun & Karoly, 1994; Kinnier & Metha, 1989). These regret differences may reflect a change in life's priorities as people age: As people become older, things that were important (such as career and ambition) become less so, and it is the things that were taken for granted that may be more important (such as spending time with friends and family).

One drawback to the research relating to aging and regret is that all the studies to date have been cross-sectional. While cross-sectional research can examine age differences, it does not measure change in age over time (Cavanaugh, 1997). Therefore it makes it difficult to know whether the differences in regret content between age groups is due to cohort effects (i.e. influences of environment) or due to actual changes in regret over time (DeGenova 1992). For example, do people begin

to regret not spending enough time with family as they get older, or are these regrets merely associated with the older adults generation? No one has yet conducted a long-term study on aging and regret, so until data is available from such a study, this question will remain open.

In review of this section, certain types of regret seem to be more common than others. Certain regrets may be mediated by age, gender and whether the regret was caused by an action or inaction. Although these results seem fairly convincing, caution should be taken when making conclusions about the findings in this section. The content categories that were used in the present study were fairly general. Further, within each category there was a large variation in the specific content and detail of the regrets mentioned. For example, the regret category *Intimate Relationships* had four specific themes that emerged, including regrets about sex, marriage, 'affairs' and the treatment of partners. So although these themes fall within the category *Intimate Relationships* it is obvious that the regret content of each theme varies greatly.

There were a large number of regrets that fell into the *Other* regret category. That is, they were too ambiguous to be placed in any of the specified content categories. In their study Gilovich and Medvec (1994) also reported that nearly 30 percent of the regrets in their study were considered 'Miscellaneous'. This result suggests that regrets are very situation specific and are not easily simplified into discrete categories.

Studies that condense regrets into broad categories do show some interesting patterns. However these results should not be taken too literally or used to make concrete conclusions about peoples regret experiences. Every person's regrets are explicitly different and the content depends on their life experiences and environment. So although these results might provide some general examples of regret content, it is important to remember they are somewhat simplified.

6.7 The Role of Regret and Life Satisfaction

This part of the research investigated the general role of regret in the participants' lives and explored the relationship between regret and life satisfaction. The aim here

was to see whether regret has a negative relationship with life satisfaction. Regret was 'quantified' using five scales that measured the number of past regrets, the intensity of past regrets, how often regrets were thought about, and the impact of regrets. The participants gave a response on each scale and then overall sample mean values were calculated for each of the four scales. Scores from the scales were then correlated with scores from three life satisfaction measures (GWB scale, Life-scale & Affectometer 2) and these correlation scores were used to determine the relationship between regret and life satisfaction.

Number of Regrets

The results showed that on average the participants had between 'few' and 'some' regrets from their past, with only 12 percent of the participants reported having 'many regrets'. The scores from this scale were correlated with the three life satisfaction measures, to test the hypothesis that "People who have more regrets will be less satisfied with their lives than people who have fewer regrets." Results confirmed this hypothesis, finding that as the number of regrets increased the scores on the life satisfaction measures decreased. Even though on average people have a low number of regrets from their past, those people who report having experienced more regret are less satisfied with their current life situation.

Intensity of Regrets

In measuring the average intensity of the participants' regrets, the results showed that they rated their regrets either as 'not very intense' or 'moderately' intense. Very few of the participants (less than five percent) rated their regrets as being 'very intense'. This result is interesting in that most of regrets we experience seem to be about matters we *don't* feel strongly about. As Zeelenberg (1999) pointed out, even the most trivial everyday decisions can cause us to regret and these sorts of 'minor' regrets are the ones that we most commonly experience.

Although intense regrets are not as common they certainly can be influential. The correlation between regret intensity and life satisfaction found that the intensity of regret was negatively related to a person's life satisfaction. This result supported the hypothesis and confirmed that people who have more intense regrets are less

satisfied with their lives than people with less intense regrets. By combing these results then, the number of regrets is not as influential as the intensity of those regrets. For example, a person may have very few regrets about their past. However one regret may be that they killed someone while driving drunk. So although it is only one regret, it is intense and is likely to have significant consequences. On the other hand, another person may have a lot of regrets about their past, which are only for fairly trivial things. For example, forgetting to feed a goldfish which died. Therefore although they have many regrets, these regrets are not very intense and are *not* likely to have significant consequences.

Overall then as the intensity of regret (and its consequences) increases it is more likely to affect life satisfaction. Even though most regrets we experience are fairly trivial, when we do experience a regret that is intense, it can have a detrimental affect on our lives.

Frequency of Regret Thoughts

The results from this area showed than on average people think about their regrets either 'occasionally' or 'some of the time'. Thus the frequency with which people think about regret seems fairly sporadic and regret is not something that dominates people's everyday thoughts. Thoughts about regret are likely to be triggered off when the consequences of these regrets become apparent. For example, if a person has had an argument with a friend and later regrets this confrontation, they are unlikely to constantly think about this regret. Instead it is likely that the person will think about this regret on occasions when they see their friend or hear the friend's name being mentioned. Thus the frequency regret though may depend on the consequences and environmental factors associated with that regret.

What seems to be apparent is that frequently thinking about one's regrets can be detrimental. In the study significant correlations were found between the frequency of regret thought and life satisfaction. Results supported the hypothesis and confirmed that people, who thought about their regrets more often than others, were less satisfied with their lives. The negative correlations between regret thought and life satisfaction were higher on average than the correlations for the other three measures of regret. This suggests that excessive *thinking* about regret may be one of

the strongest detrimental aspects of regret that affects life satisfaction. This proposition is consistent with current theory, which claims that regret can be destructive through "...an excessive amount of time spent in regret" (Landman, 1993, p31).

Overall then the writer suggests that people who spend excessive time dwelling on their regrets, can be 'paralysed' into dwelling on the negative aspects of their past. Occasionally thinking about ones regrets is fairly normal and unlikely to be detrimental. However, when people start to ruminate on their regrets and get stuck in a "If only I had/hadn't...?" counterfactual way of thinking, they may be unable to see the positive aspects of life and therefore be less satisfied with their lives.

Impact of Regret

To help test the overall impact of regret, participants of the study were asked, "In general, how big an impact would you say your regrets have had on your life?" Results from this question showed that on average the impact of regret was 'moderate'. The majority of participants (over 60 percent) rated their regrets on the higher end of this impact scale (i.e. either moderate, large or very large impact), indicating that often the consequences of regret can be very significant.

The correlations between this impact scale and the life satisfaction measures supported the hypothesis and found that the participants who rated their regrets as having a larger impact in their lives, were less satisfied with their lives than those participants who's regrets had had a smaller impact. The overall impact of a regret is a very influential component of a regret experience that can negatively influence a person's life satisfaction. This makes sense, because the overall impact of a regret (i.e. the *consequences* of a regret) is likely to be the determining factor in how it affects someone.

Investigating the role of regret in people's lives suggests that there are different aspects of regret that contribute to affect life satisfaction. Frequently thinking about regret, and regret experiences that have a larger impact seem the most detrimental aspects of regret. The number of regrets a person has and the intensity of their

regrets do not seem as important. When these findings are incorporated into an everyday life example, it stands to reason: A person may have a great many regrets in the past and may have some regrets that have been intense. However, unless these regrets have had a subsequent impact on their lives, they are unlikely to think about them much and so these regrets are unlikely to go on affecting them. The regrets of considerable impact that cause a person to constantly think, "If only I had acted differently!" that are likely to be the most destructive.

Although the different aspects of regret (i.e. its intensity, impact, frequency and how often it is thought about) have been presented separately, it is likely that they are in fact interrelated. Therefore the overall effect of regret is likely to be the result of a combination of these factors, with the influence of each factor culminating to produce a greater overall affect. Here is an example of how these aspects of regret may be interrelated: Someone who has a lot of regrets is likely to have some intense regret experiences. The more intense a regret is the larger the impact the regret will have in their life. If the regret has a large impact then the person is also likely to think about their regret more often. It is this excessive dwelling over regrets that seems to be the way in which regrets have a detrimental effect on a person's life. Thus these factors of regret can have a cumulative effect.

Overall these results support previous research which has also established that regret can be harmful. DeGenova (1993) found that regret was a common predictor of life satisfaction in an older population, and Kinnier and Metha (1989) found that certain regrets were negatively correlated with life satisfaction. Also in support of this argument, past research evidence claims that dwelling on regrets can have a negative impact on one's psychological well-being and may result in further emotional problems such as depression, neuroticism, or other psychological distress (Landman 1993). Future research the looks further into the destructive function of regret will be discussed in following sections.

The results from this section seem fairly convincing, however caution should be taken when drawing conclusions about the effects of regret. The reader needs to be mindful that no direct relationships between regret and life satisfaction have been assessed, only the *correlations* between these two variables. This means that no

causal statements should be made about the affect of regret on life-satisfaction, i.e. it would be inaccurate to say "Regret causes a person to feel less satisfied with their life" based on the results from the present study. Numerous other variables such as a person's personality, their mindset and other life factors, are also likely to influence a person's life-satisfaction. Regret seems to have some influence and further research will hopefully continue to clarify this effect.

6.8 Constructive Functions of Regret

As the previous section has shown regret can be destructive and has the potential to affect life satisfaction. However if regret experiences are dealt with appropriately they can in fact serve a number of beneficial purposes (Landman, 1993). The aim of this section of the study was to investigate the constructive potential of regret and to explore some of the reasons why regret has a positive/negative affect in people's lives. To explore this aim, the participants were asked to specify on a scale the type of impact regret had had in their lives. Results showed that on average regrets had an *'Equally negative and positive impact'* or a *'Mostly positive impact'*. Remarkably, only 20 percent of the participants experienced regrets that had an *'Entirely negative impact'* or a *'Mostly negative impact'*. These findings clearly show that although the experience of regret can certainly be painful, its overall impact is often a positive one.

The results from this scale were further explored by having the participants explain in their own words why they thought their regrets had impacted on their lives in that way. Themes were extracted from the participants' answers in an attempt to understand the coping mechanisms that are used by people to deal with the experience of regret.

For the participants who rated the impact of their regrets as having an *'Entirely positive impact'* or *'Mostly positive impact'*, the general consensus was that, overall, their regrets had been very constructive. They reported that their regrets had facilitated important learning experiences, which had helped them to make better decisions and avoid making similar mistakes in the future. These learning experiences had also encouraged people to make amends for their mistakes, by undoing the cause of their regrets (For example: apologising to people they have hurt

in the past). Certain inaction regrets had encouraged them to make the most out of their life, by embracing opportunities when they arose and spending more quality time with friends and family. Regret experiences had also helped others to mature and learn more about themselves.

These explanations support the ideas of other researchers who have maintained that regret can motivate people to learn from their mistakes and avoid making similar mistakes in the future (e.g. Landman 1993; Zeelenberg, 1999). Also the answers have confirmed previous suggestions, that a regret experience can be motivation to undoing the cause of regret (Zeelenberg, Inman & Pieters, 2001).

The participants, who rated their regrets as having had an *Equally Negative and Positive Impact*, said that their regrets initially had a negative affect on their lives. These detrimental affects included feelings of distress and pervading "What if..." counterfactual thoughts. These people often felt like they were 'victims' of their regrets and faced setbacks as a result of their mistakes. However these negative feelings associated with their regrets were often worked through and as a result positive aspects of their experiences emerged. Many of the positives that had been gained from their regrets were the same as those already mentioned. These included learning important things from mistakes and preventing themselves and others from making similar mistakes. Also regret had helped them to become stronger and more mature, as well as moving them on with their life in a new positive direction.

These results again confirm that regrets can have a constructive function. While regret may initially be unpleasant and force us to admit that we have made a mistake, ultimately it can be an important learning tool that helps us to move on and live a more fulfilled life in the future.

However not everyone's regret experiences are constructive. The participants who rated their regrets as having a *'Mostly Negative Impact'* or an *'Entirely Negative Impact'* had very few (if any) positive outcomes to reveal. The negative impacts of these regrets were often the result of an inability to deal with regret effectively, or to learn from past mistakes. Therefore these people continued to repeat the same mistakes and experience regret for them. As a result regret has not motivated a desire to change; instead regret only caused them to continue dwelling on the lost

opportunities brought about by their mistakes. Thus overall the effect of regret was a negative one.

In review of these results, regret can have both a positive and a negative impact. As Zeelenberg, Inman and Pieters (2001, p152) state, "Regret is related to thinking about what went wrong, and wanting a better outcome in the future, and it should motivate people to think about alternative courses of action to reduce further conflict." Thus if a person is able to accept their mistakes and learn from past regrets, their regret experience can be constructive. However if a person is unwilling, or unable to learn from their past regrets, they are likely continue to make the same mistakes again and again. As Wrosch and Heckhausen (2002, p341) state, "The experience of regret may require individuals to adaptively regulate their lives. People who do not learn to regulate failure may continuously be confronted with recurrent thoughts and emotions concerning undesired outcomes of development." Subsequently, dwelling on the lost opportunities of these regrets can have a destructive affect on their lives.

To further investigate the effect that regret can have on a person's life, scores from the 'Type of Impact' scale were correlated with scores from the three life-satisfaction measures. The results of this correlation showed that the type of regret impact was positively correlated with life-satisfaction. This means that if a person's regret experiences generally have a positive impact on their lives, as a consequence they are likely to be more satisfied with their lives; if a person's regret experiences have a negative impact on their lives, they are likely to be less satisfied with their lives.

These results tie in with previous research, which has also found that dealing with regrets in a positive fashion is related to improved life satisfaction. Holahan, Holahan and Wonacott (1999) found that people who reflected on their lives and made positive changes based on their life expectations not only had fewer regrets, but were also more satisfied with their lives. Similarly, past studies have confirmed that reflecting on past regrets and unresolved issues can enhance life satisfaction (Butler, 1963 cited in DeGenova, 1993). The effect of regret on a person's life seems specifically related to how a person deals with their regret. It may be impossible to change past mistakes, however, the impact of these mistakes and the

amount of regret they cause can be reduced. This in turn can have a positive affect on life satisfaction.

Here again caution must be taken when commenting on the effects of regret on life satisfaction. As mentioned in the previous section, the relationships found in the present study have only been correlations and so it is difficult to make causal statements regarding the direct influence of regret. Therefore we can only *assume* that the manner in which people deal with regret (i.e. either positively or negatively) has an affect on life satisfaction.

6.9 People With No Regret

Although the majority of the participants in the present study reported having regrets, there were a small number (8.9 percent) who reported having no regrets. Most previous studies have not given participants the option of choosing a 'no regrets' option. Thus there is limited data from people who have no regrets. This lack of information indicates that this is an area of regret research that has been ignored in the past. When the focus of research is about regret, it may sound pointless to study those people who don't have any. However, as the present research has shown, a number of helpful points can be taken about dealing with regret and how to avoid future regret.

The first aim of this section was to look at some of the strategies used to prevent things from becoming regrets. To achieve this, the participants who reported having 'no regrets' were asked to explain in their own words *why* they have no regrets. The researcher then evaluated their answers, recording the main ideas from each answer.

All of the participants in this 'no regrets' group made it clear that they had made mistakes in the past and had even had feelings of regret about some of their mistakes. However the main reason as to why they no longer had any regrets, was the way they had been able to address their mistakes and deal with their mistakes as soon as they occurred. This meant that once they had done this, they were able to leave them in the past. Also by undertaking this process they were able to learn from their mistakes and avoid making similar mistakes in the future. In this way feelings of regret were prevented. Some of these participants did comment that they had experienced regret in the past. However the reason as to why these regret

experiences no longer affected them was that, like their mistakes, they dealt with their feelings of regrets as soon as they noticed them. By doing this, the participants were able to prevent the regrets from affecting them in the future.

The second aim of this part of the research was to investigate whether the people who reported having no regrets in their lives, were also more satisfied with their lives than those people who reported having regrets. To test this, the mean life satisfaction scores of the 'regrets' participants were compared with the mean life satisfaction scores of the 'no regrets' participants. If life satisfaction scores were lower for the 'regrets' group, this would suggest that overall feelings of regret were associated with a lower life satisfaction. The results showed that on average the 'regrets' group had lower life satisfaction scores than the 'no regrets' group, on two of the three measures. This suggests that the experience of regret *is* associated with lower life satisfaction. More specifically, those people who are able to deal with their mistakes effectively and are able to prevent them from becoming regrets are likely to be more satisfied with their lives than those people who have regrets.

6.10 Limitations of the Study

A number of limitations with the present study should be noted. Firstly certain aspects of the sample may call into question the accuracy of the findings. The sample was one of convenience and the researcher knew a number of people that completed the questionnaire. Answers may have been influenced by 'social desirability bias' i.e. giving answers that respondents thought the researcher may want, or the opposite; giving 'safe' answers, for fear that the researcher would identify it as their questionnaire[9]. Overall this means that the answers given in the present study may not have been an accurate representation. Therefore to overcome any potential effects of a familiar participant sample, the researcher recommends that a more random sample be used. This would also help to minimise any potential ethical issues associated with having a familiar sample.

---

[9] Note: Although some of the participants may have been concerned about the researcher identifying their answers, all the questionnaires of the present study remained anonymous to the researcher. Therefore no answers identified a person in anyway.

There were much more women than men who responded to the questionnaire in the present study. Even though the questionnaire was administered equally among men and women, nearly 75 percent of all the respondents were women. Any differences between men and women in the present study (such as comparing the difference between men and women's regret content) need to be "taken with a grain of salt", due to the gross difference in these group sizes. It is often difficult to get equal numbers across gender groups (women seem to be more numerous in previous research as well, e.g. DeGenova, 1992; Lecci Okun & Karoly, 1994), however research that has gender comparisons as its focus needs to make sure that both men and women are equally represented within their studies.

One difficulty that arises with research that focuses on the experience of regret (and any research that looks at behaviour) occurs when trying to demonstrate the direct effect of regret. In the present study the researcher has often made causal claims regarding the effect regret has on a person's life. However these claims are somewhat arbitrarily determined (i.e. only based on correlations) and there is no direct evidence to support them. Prolonged time spent regretting can arguably influence a persons psychological adjustment, however there are a large number of external influences or variables that also determine a persons well-being and mediate the affects of regret. Overall these results suggest *possible* characteristics of regret subsequent research is needed in this area to further help determine the causal effect that regret might have on a person's life (this will be discussed in the next section).

Other possible limitations concerning the questionnaire used in the present study should also be noted. For some of the questions there may have been some confusion as to what the researcher was actually asking. A number of questions did not specify the time frame within which the questions were to be answered. For example, in the question "When you look back on your life to this point do you have any regrets?" there may have been some ambiguity in the way that people interpreted the question. Some of the 'no regrets' participants admit to having regretted things in the past, but are no longer bothered by these regrets. Thus confusion may have arisen as to whether they were supposed to answer this question referring to all the regrets they have *ever* had, or just referring to the regrets that they had at this point in time. This example shows that unless questions and instructions are made perfectly

clear, there can be an important difference in how the questions are interpreted. Therefore researchers need to take care that their questions are specifically related to the areas of regret they are studying. This precaution will avoid confusion and ensure that participants are all providing information in their answers that are valid.

There are a number of further points relating to the questionnaire that should be brought to the reader's attention. Firstly, most of the information from the study was gathered through the use of scales. Therefore readers should be aware that these findings are fairly general and show overall patterns of regret. The information gathered from these scales should not be used to make generalisations about people's specific regret experiences. An exploratory question (see question 6, section 2 of the questionnaire, in Appendix A) was used to find further information about the answer given in question 5, section 2. This combination of using both closed questions (the scales) and open questions (exploratory questions) seemed to work very effectively to gain additional information from the scales. Thus the present researcher recommends that this combination of questions be used in future studies to help explain research findings in more detail.

The use of multiple-option closed questions, can also give people an "easy way out" when it comes to answering questions. Often when people are responding to closed-ended questions they will choose the middle option, because they either do not feel strongly about an issue, or because they are undecided and so the middle option is the 'safest' (Goddard III & Villanova, 1996). Also when people are answering questions on a scale, there may be a tendency to overestimate positive aspects, or underestimate negative aspects of their lives. By combining these closed-ended questions with additional exploratory questions participants will be required to explain their answers in more detail, and may be less likely to 'fabricate' them.

With any questionnaire based research there is likely to be ambiguity relating to the data that is collected. Also with any self-report measure study there is a tendency to bias recalled information, especially when data is collected using self-report measures alone (Lecci Okun & Karoly 1994). Therefore some of the limitations relating to the present studies method are likely to be associated with any questionnaire-based research.

6.11 Future Research Ideas

The current findings and limitations of the study provide a number of suggestions for future research. The present study has shown that there are different aspects of regret that need to be acknowledged, including how often a person thinks about their regrets and the intensity of their regrets that can determine how regret affects a person. Future research needs to continue to make these distinctions when studying regret. It is not enough for a research question to ask, "Does regret affect life satisfaction?" Instead research questions need to be more specific and clearly identify what aspect of regret is being assessed. For example, "Is increased thought about regret negatively associated with life satisfaction?"

The present study has also provided some insight into how the negative affects of regret can be minimised, and how regret experiences can be used constructively. Future research needs to expand on some of these ideas, and continue to focus more specifically on the process of regret and how to minimise the negative affect of regret in their lives. In taking this line of research one step further, future studies could adopt a clinical focus and examine whether regret is associated with mental illness. For example, do people who are depressed report that their regrets have had a large impact in their lives?

One way to achieve a more in-depth look into the experience of regret would be to conduct a *qualitative* study, which involves people discussing their regret experiences either on their own, or in a group. As far as the writer is aware, no in-depth studies of this nature have yet been conducted. A qualitative study would provide a much more detailed explanation of regret, allowing people to directly describe how they think regret affects their lives. This means that fewer assumptions would have to be made about the effects of regret. For example, if part of the study were looking at the relationship between regret and responsibility, the participants could directly comment on whether they thought personal responsibility was a determining factor of regret. A study of this nature would also allow the researchers to see the personal characteristics of the participants while they discuss regret. For example, are people comfortable discussing their regret experiences, or are they more inclined to be reserved?

Following on from the present research, future studies could focus on the difference between interpersonal and non-interpersonal regrets. The present research has shown that regrets involving other people are fairly common. Therefore research in this area is very relevant. Some future ideas could look at whether interpersonal regrets are more intense or whether people think about interpersonal regrets more than non-interpersonal regrets. Also whether interpersonal regrets have a greater negative impact than non-interpersonal regrets, and whether people take steps to compensate for their interpersonal mistakes sooner than their non-interpersonal mistakes.

Although the present study attempted to investigate some age differences associated with regret, the quality of this area of the research was poor. Future research is needed, which focuses on the changes in regret and the way regret is dealt with, as people age. It has been mentioned in previous sections that longitudinal research in this area would be very useful in determining whether there are any age differences associated with regret.

Another area of research could focus on the factors, which regulate regret. The present study has suggested that environmental and situational factors can affect how a person experiences regret. Therefore a future study could investigate whether a person's life success (e.g. wealth, job status, strong marriage, good social life etc.) is associated with fewer and less intense regrets. It would also be interesting to see whether an aspect of a person's personality affects their regret experience. For example, do people who are extraverted/positive have fewer regrets than people who are more introverted/negative?

No studies have yet looked regret with respect to cultural differences. All of the research to date (including the present study) has been based on modern western populations. Western cultures place a much greater emphasis on individual achievement and revere action over inaction; to acknowledge regret entails admitting personal unworthiness and may harm one's self-esteem (Landman 1993). In other more dependent cultures regret may be less intense for individual mistakes. This is because any trouble is seen more as the responsibility of a social group and so admitting regret will not damage one's self-esteem. Alternatively, regret may be more damaging if the result of a mistake affects others and the person feels they have

let the whole group down. Some of the basic mechanisms that operate with respect to regret are likely to be universal, such as those that account towards the temporal pattern of action and inaction regrets. However the specific orientations, religions, priorities and the overall values that make up the foundations of different cultures are likely to affect the experience and expression of regret (Landman, 1993). Therefore future research could address this issue, to see whether there are in fact any significant differences in the experience and expression of regret between cultures.

Finally, future research could incorporate people who have no regrets into their studies (if it can be reliably ascertained that such people exist). In the past these people have been largely ignored, because the focus has been on regret itself. However studying people have *no* regrets is as important in helping to understand the concept of regret, as are studying people who do have regrets. The present study has shown useful information can be gathered from people who are able to affectively deal with potentially regretted situations. Therefore future research should aim to incorporate people with no regrets into research in an attempt to understand the concept of regret more clearly.

6.12 Conclusions

The outcomes of the present research have provided some interesting insights into the concept of regret. It has incorporated a number of areas of regret that have looked at the characteristics of how regret is experienced and the affect that regret can have on a person's life. In following with the main aim if the study, a number of recommendations have been made to help people minimise the frequency and negative intensity of their regret experiences. Based on the findings of the present research a number of conclusions can be drawn

First, the results from the present study support the argument that personal responsibility for an outcome is a *necessary* condition for regret. This affirms that someone can only truly feel regret for an outcome that is directly caused by their own action or inaction. Although people may claim to regret things for which they were not responsible, this is an incorrect use of the term. Therefore it is concluded that personal responsibility should not only be incorporated within the definition of regret, but should also be used to help distinguish regret from other similar emotional

states (such as grief). Feelings of regret can also be experienced for the same repeated mistakes or ongoing events. Regardless of whether a person knows the consequences of their decision prior to their decision being made, they may still experience regret for it.

The present research did *not* find that regrets of inaction were regretted more often than regrets of action, nor were inaction regrets any more significant than action regrets. This result was found equally for men and women, as well as for all ages. Therefore this study suggests that overall there is no distinction in the experience of action or inaction regrets.

In relation to the temporal pattern of regret evidence was found that both supported and refuted this theory. In conjunction with a number of mechanisms suggested by other researchers, the present research points to the view that a temporal pattern may exist for action and inaction regrets. However, there is no direct evidence to prove that feelings of regret change over time and so conclusions based on these findings should be tentative. Conversely, some results from the present study support conflicting arguments to the temporal pattern of regret. The present research found that action and inaction regrets have differing emotional profiles. This suggests that it is a difference in the emotion of action and inaction regrets that maintains a difference for the times in which these types of regrets are experienced. Also it was shown that people feel regrets for their actions sooner than their inactions, which suggests that the affects of inactions may not be apparent until much later in a person's life. These results therefore suggest that it is the different characteristics of regret that cause this 'temporal pattern', not regret changing over time.

Therefore in light of all these findings it is difficult to make any conclusions about how people experience regret over time. Some of these basic mechanisms may operate, however further evidence is needed (such as results from a longitudinal study) before this temporal pattern can be confirmed.

The present research found that regrets about *Intimate relationships, Family, Education*, and *Health/self-care* were the most common and most important types of regret. Some differences were found in the type of regret actions and inactions elicited, and differences were also found between genders. While information about the content of people's regrets is interesting, it does not help in the understanding of the process of regret and how regret affects people's lives. Therefore the writer recommends that future studies focus more on the process of regret, in an attempt to help people minimise the frequency and negative consequences of regret in their lives.

The second part of the study focused on people's regret experiences in general, and the implications of these regrets on life satisfaction and well-being. Regret can have a detrimental affect on a person's life. People, who experience very intense regret, have regrets which impact on their life in a negative way and who think about their regrets frequently, are less satisfied with their lives. The number of regrets a person has does not seem affect their life satisfaction as strongly. These different factors of regret appear to be interrelated and have a cumulative affect.

However regret does not have to be entirely negative. Regrets can have a constructive function depending on how a person deals with them. The results from the present study have shown that people who report having no regrets, or report that their regret experiences have been positive, have greater life satisfaction than those people who report that their regrets have had a negative impact in their life. Based on these differences a number of suggestions on how to minimise the affects of regret can be made.

First, people need to accept their past mistakes and realize that they are going to continue to make mistakes in the future. They also need to be aware that there are limited options in life, and so with any decision made there are a number of options that must be sacrificed.

Second, it is important to use past mistakes that have been regretted as learning experiences. Learning from past regrets can help to prevent making the same mistakes in the future. It can also motivate people to undo the cause of their regrets

and encourage them to make better decisions in the future. People who take these positive steps have greater life satisfaction; people who are unable to learn from their regrets continue to make the same mistakes and have lower life satisfaction.

Finally, people should minimise the amount of time they spend thinking about regrets or dwelling on past mistakes. This is especially the case if a regretted decision cannot be changed. Spending time dwelling on things that cannot be changed is a waste of time and energy and as the present study has shown it can also be detrimental. Regrets need to be analysed: If the cause of a regret can be undone, then immediate steps should be taken in this direction to implement this change; if the cause of a regret cannot be undone then this mistake should be considered a learning experience and left in the past. Either way nothing positive is achieved by ruminating over one's regrets.

Overall the present study has shed some light onto the concept of regret and how it is experienced. While some of the results have challenged previous theories, other results have extended previous research. This in turn has provided some new insights for future research to continue studying the experience of regret and the affect it can have on a person's life.

REFERENCES

Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Well-being: Americans' Perceptions of Life Quality.* NY: Plenum Press.

Baum, S. K. (1999). Who has no regrets? *Psychological Reports, 85,* 257-260.

Bell, D. E. (1982). Regret in decision making under uncertainty. *Operations Research, 30,* 961-981.

Byrne, R. M. J., & McEleney, A. (2000). Counterfactual thinking about actions and failures to act. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 26,* 1318-1331.

Cavanaugh, J. C. (1997). *Adult Development and Aging* (3rd ed). CA: Brooks/Cole Publishing Company.

Connolly, T., Ordonez L. D., & Coughlan, R. (1997). Regret and Responsibility in the evaluation of decision outcomes. *Organizational Behavior and Human Decision Processes, 70,* 73-85.

DeGenova, M.K. (1992). If you had your life to live over again: What would you do differently? *Aging and Human Development, 34,* 135-143.

DeGenova, M. K. (1993). Reflections of the past: New variables affecting life satisfaction in later life. *Educational Gerontology, 19,* 191-201.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95,* 542-575.

Farrell, D. M. (1997). Book review. *The Philosophical Quarterly, 47,* 397-400.

Feldman, J., Miyamoto, J., & Loftus, E. F. (1999). Are actions regretted more than inactions? *Organizational Behavior and Human Decision Processes, 78,* 232-255.

Fry, P. S., & Barker, L. A. (2001). Female survivors of violence and abuse: Their regrets of action and inaction in coping. *Journal of Interpersonal Violence, 16*, 320-342.

Gilovich, T., Kerr, M., & Medvec, V. H. (1993). Effect of temporal perspective on subjective confidence. *Journal of Personality and Social Psychology, 64*, 552-560.

Gilovich, T., Kruger, J., & Medvec, V. H. (2002). The spotlight effect revisited: Overestimating the manifest variability of our actions and appearance. *Journal of Experimental Social Psychology, 38*, 93-99.

Gilovich, T., & Medvec, V. H. (1994). The temporal pattern to the experience of regret. *Journal of Personality and Social Psychology, 67*, 357-365.

Gilovich, T., & Medvec, V.H. (1995). The experience of regret: What, when, and why. *Psychological Review, 102*, 379-395.

Gilovich, T., Medvec, V.H., & Chen, S. (1995). Commission, omission, and dissonance reduction: Coping with regret in the "Monty Hall" problem. *Personality and Social Pschology Bulletin, 21*, 182-190.

Gilovich, T., Medvec, V. H., & Kahneman, D. (1998). Varieties of regret: A debate and partial resolution. *Psychological Review, 105*, 602-605.

Gilovich, T., Medvec, V. H., & Savitsky, K. (2000). The spotlight effect in social judgement: An egocentric bias in estimates of the salience of one's own actions and appearance. *Journal of Personality and Social Psychology, 78*, 211-222.

Gleicher, F., Kost, K. A., Baker, S. M., Strathman, A. J., Richman, S. A., & Sherman, S. J. (1990). The role of counterfactual thinking in judgements of affect. *Personality and Social Psychology Bulletin, 16*, 284-295.

Goddard III, R. D., & Villanova, P. (1996). Designing surveys and questionnaires. In F. T. L. Leong & J. T. Austin (Eds), *The psychology research handbook* (pp. 85-97). CA: Sage Publications, Inc.

Hattiangadi, N., Medvec, V.H., & Gilovich, T. (1995). Failures to act: Regrets of Terman's geniuses. *International Journal of Aging and Human Development, 40,* 175-185.

Holahan, C. K., Holahan, C. J., & Wonacott, N. L. (1999). Self-appraisal, life satisfaction, and retrospective life choices across one and three decades. *Psychology and Aging, 14,* 238-244.

Kahneman, D. (1995). Varieties of counterfactual thinking. In N. J. Roese & J. M. Olson (Eds.), *What might have been: The social psychology of counterfactual thinking* (pp. 375-396). NJ: Erlbaum.

Kahneman, D., & Tversky, A. (1982a). The psychology of preferences. *Scientific American, 246,* 160-173.

Kammann, R., & Flett, R. (1983). *Sourcebook for Measuring Well-Being with Affectometer 2.* Dunedin: Why Not? Foundation.

Kinnier, R. T., & Metha, A. T. (1989). Regrets and priorities at three stages of life. *Counselling and Values, 33,*182-193.

Landman, J. (1987a). Regret and elation following action and inaction: Affective responses to positive versus negative outcomes. *Personality and Social Psychology Bulletin, 13,* 524-536.

Landman, J. (1987b). Regret: A theoretical and conceptual analysis. *Journal for the Theory of Social Behaviour, 17,* 135-160.

Landman, J. (1993). *Regret: Persistence of the possible.* New York: Oxford University Press.

Landman, J., & Manis, J. D. (1992). What might have been: Counterfactual thought concerning personal decisions. *British Journal of Psychology, 83,* 473-477.

Lata, J. L., Nakamoto, M. J., DeGenova, M. K. (1997). Regrets of college students: Implications for outlook on life. *College Student Journal, 31,* 480-489.

Lecci, L., Okun, M. A., & Karoly, P. (1994). Life regrets and current goals as predictors of psychological adjustment. *Journal of Personality and Social Psychology, 66,* 731-741.

Metha, A. T., Kinnier, R. T., & McWhirter, E. H. (1989). A pilot study on the regrets and priorities of women. *Psychology of Women Quarterly, 13,* 167-174.

Ordonez, L. D., & Connolly, T. (2000). COMMENT Regret and responsibility: A reply to Zeelenberg et al. (1998). *Organizational Behavior and Human Decision Processes, 81,* 132-142.

Roese, N. J. (1997). Counterfactual thinking. *Psychological Bulletin, 121,* 133-148.

Savitsky, K., Medvec, V. H., & Gilovich, T. (1997). Remembering and regretting: The Zeigarnik effect and the cognitive availability of regrettable actions and inactions. *Personality and Social Psychology Bulletin, 23,* 248-257.

Seiden, V. L. (2001). Profiling work and personal regret: Linking regret to quality of life. *Dissertation Abstracts International: Section B: the Sciences & Engineering, 62,* 2104.

Seta, J. J., McElroy, T., & Seta, C. E. (2001). To do or not to do: Desirability and consistency mediate judgements of regret. *Journal of Personality and Social Psychology, 80,* 861-870.

Shimanoff, S. B. (1984). Commonly named emotions in everyday conversations. *Perceptual and Motor Skills, 58,* 514.

Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgement and choice. *Journal of Experimental Social Psychology, 27,* 76-105.

Stewart, A. J., & Vandewater, E. A. (1999). "If I had it to do over again…": Midlife review, midcourse corrections, and women's well-being in midlife. *Journal of Personality and Social Psychology, 76,* 270-283.

Van Dijk, W.W., van der Pligt, J., & Zeelenberg, M. (1999). Effort invested in vain: The impact of effort on the intensity of disappointment and regret. *Motivation and Emotion, 23,* 203-220.

Wrosch, C., & Heckhausen, J. (2002). Perceived control of life regrets: Good for young and bad for old adults. *Psychology and Aging, 17,* 340-350.

Zeelenberg, M. (1999). The use of crying over spilled milk: A note on the rationality and functionality of regret. *Philosophical Psychology, 12,* 325-340.

Zeelenberg, M., Inman, J. J., & Pieters, R. G. M. (2001). What we do when decisions go awry: Behavioral consequences of experienced regret. In E. U. Weber & J. Baron (Eds.), *Conflict and tradeoffs in decision making* (pp 136-155). NY: Cambridge University Press.

Zeelenberg, M., van Dijk, W.W., & Manstead, A. S. R. (1998). Reconsidering the relation between regret and responsibility. *Organizational Behavior and Human Decision Processes, 74,* 254-272.

Zeelenberg, M., van Dijk, W. W., & Manstead, A. S. R. (2000). REJOINDER Regret and responsibility resolved? Evaluating Ordonez and Connolly's (2000) conclusions. *Organizational Behavior and Human Decision Processes, 81,* 143-154.

96

Zeelenberg, M., van der Pligt, J., & Manstead, A. S. R. (1998). Undoing regret on Dutch television: Apologizing for interpersonal regrets involving actions or inactions. *Personality and Social Psychology Bulletin, 24,* 1113-1119.

APPENDIX A
Regret Questionnaire

REGRET: How does it affect our lives?

INFORMATION SHEET

My name is David Bloore and I am currently completing a Masters of Science Degree in Psychology at Massey University, Palmerston North. My supervisor is Dr. Ross Flett who is a senior lecturer at Massey University, Palmerston North.

This research questionnaire is part of my thesis project looking at what people regret and whether regret has an overall effect on people's life satisfaction. The overall aim of the study is to try and understand the concept of regret more clearly.

If you decide to participate in this study, you will be required to answer questions about some of your regrets and how they have affected you. The entire questionnaire should take you no more than 20 minutes to complete.

You are assured that all the information you provide is confidential to the researchers and will be used only for the purposes of the study. The questionnaire is completely anonymous and we do not need to know your name. Your reply will not be identified as yours in any way.

Remember, you are completely free to refuse to answer any particular questions, and to withdraw from the study at any point.

If you would like a summary of the research findings when the study is completed please provide an email or postal address to the researcher. You can do this by emailing the researcher at the address below.

If you have any further queries about the study do not hesitate to contact me. My email address is d.bloore@actrix.co.nz . Alternatively you can contact Dr. Ross Flett on ph. (06) 350 5799 extn. 2051 or by email R.A.Flett@massey.ac.nz .

Regards

David Bloore
Researcher

Section 1 - Questions related to specific regret.

When asked, most people agree that they have some regrets about their past. These regrets may be linked to a range of different things that happened or perhaps didn't happen in your life.

Regrets could be about *highly specific* circumstances or events.
For example, perhaps you once smacked your child in the heat of the moment and afterwards regretted doing it, or you may have spoken unkindly to a workmate and regretted that later.

Regrets could be about *ongoing* events or circumstances.
For example, perhaps you are a cigarette smoker and regret ever starting, or maybe you have spent too much time at work and regret not spending more time with your children.

1) When you look back on your life to this point do you have any regrets? Please describe them in the spaces below. You may list up to three regrets but can list fewer. Or alternatively tick the box *'I have no regrets in my life'.*

a) _____
_____
_____
_____

b) _____
_____
_____
_____

c) _____
_____
_____
_____

Choose your **most significant** regret (the regret most significant in your life) from the ones listed above by writing the letter of the regret in the box. ☐
Note: Questions **2 to 6** will be based on this regret chosen.

OR   I have no regrets in my life ☐
If you tick this item please go straight to Section 3 on page 6.

People sometimes feel different feelings about regrets in their lives. You selected a 'significant' regret in your life in the question **1** above.

2) By choosing a number from the scale below, tell us <u>how often</u> this regret makes you feel each of the feelings in the list.

My regret causes me to feel:

1----------------2 ---------------- 3 ---------------- 4------------------5
Not at all   Occasionally   Some of   Often   All the
                                the time   time
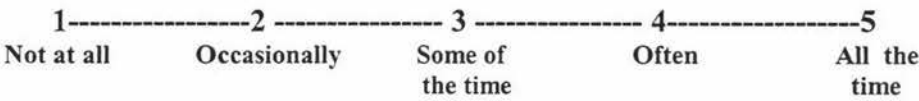
For Example:

Embarrassed...1 2 3 (4) 5

This response shows that this person feels embarrassed about their regret often.

Angry 1 2 3 4 5

Contemplative.....................................1 2 3 4 5

Empty...1 2 3 4 5

Disgusted...1 2 3 4 5

Dreamy...1 2 3 4 5

Helpless...1 2 3 4 5

Embarrassed.......................................1 2 3 4 5

Nostalgic..1 2 3 4 5

Longing...1 2 3 4 5

Guilty...1 2 3 4 5

Sentimental...1 2 3 4 5

Sad..1 2 3 4 5

Irritated...1 2 3 4 5

Wistful...1 2 3 4 5

Unfulfilled...1 2 3 4 5

---

3) With the same 'significant' regret in mind, indicate how long ago the event/decision/action occurred that has caused you regret.
Tick or fill in the appropriate option below. Choose 1 option only.

For Example: A person might regret having lied to a friend 5 years ago. Therefore they would write 5 in the appropriate option.

Approximately 1 week ago ....☐

Approximately 1 month ago..............................☐

Approximately 6 months ago.............................☐

Approximately 1 year ago.................................☐

Approximately ☐ years ago *(fill in the appropriate number here)*

Although people may make poor decisions or perform hasty actions, they may not actually *regret* this until they have thought about it later.

4) With the same 'significant' regret you selected above in mind, indicate how long after the situation occurred that the feelings of regret began.

For Example: A person may have lied to a friend 5 years ago. However it was not until 6 months later that they realised the consequences of their action and regretted it. So they would tick the "6 months" box below.

Immediately after the event................................☐

Approximately 1 week after the event ....☐

Approximately 1 month after the event.................☐

Approximately 6 months after the event................☐

Approximately 1 year after the event...................☐

Approximately ☐ years after the event *(fill in the appropriate number here)*

5). People have different reasons for regretting things in their past. Often it is the *consequences* (or potential consequences) of these things that actually cause regret.

For example: You may regret turning down a job offer a few years ago, however it is the consequence of having to settle for a job with a lower salary that is the cause of your regret.

*Or in **another example**: You might regret having started smoking 5 years ago, but it is the consequence of being unfit that is the cause of your regret.*

With your significant regret in mind, please try to explain what <u>consequences</u> related to the event that took place that have caused you to regret it *i.e.* Why is it a source of regret for you?

_____

_____

_____

_____

_____

<u>Section 2. Questions related to general Regret.</u>

The following section asks questions about your *general* regret experience.

1) In general, <u>how many</u> regrets about the past do you have?
          Circle the best answer for you on the scale below.

For Example: If you have 'some regrets' about the past you would circle number 3.

1	**2**	**3**	**4**	**5**
Very Few Regrets		Some Regrets		Many Regrets

2) In general <u>how intense</u> would you rate most of your regrets?
   Circle the best answer for you on the scale below.

For Example: If most of your regrets were 'not very intense' you would circle number 1.

1	**2**	**3**	**4**	**5**
Not Very Intense		Moderately Intense		Very Intense

People sometimes report that they think about their regrets frequently or just occasionally.

3) In general <u>how often</u> do you think about the regrets in your life?
Circle the best answer for you on the scale below.

For example: If you think about your regrets all the time, you would circle number 5

1	**2**	**3**	**4**	**5**
Not at all	Occasionally	Some of the time	Often	All of the time

4) In General <u>how big an impact</u> would you say your regrets have had on your life?
Circle the best answer for you on the scale below.

For example: If you think that your regrets have had 'A large impact' in your life, then they would circle number 4.

1	**2**	**3**	**4**	**5**
No Impact	A Small Impact	A Moderate Impact	A Large Impact	A Very Large Impact

Some people report that their regrets have had an entirely negative impact on their lives. While others report that they have gained positive things from their regret experiences.

For example: You might have passed up a job when they were younger and regretted this missed opportunity later. However this regret then motivated them to be more assertive in their life, thus resulting in some positive impact as well.

5) When you look back at the overall impact of your regrets on your life, would you say that have they had a *negative* effect, a *positive* effect or *both negative and positive* effect?
Circle the best answer for you on the scale below.

For example: If you thought that in general your regrets have had 'mostly a negative impact' on your life, you would circle number 2.

1	**2**	**3**	**4**	**5**
Entirely Negative Impact	Mostly Negative Impact	Equally Negative & Positive Impact	Mostly Positive Impact	Entirely Positive Impact

6) Why do you think that regret has had this sort of impact?
In one or two sentences please try and elaborate on your answer in question 5 and explain why the regret has had this impact.

For example: If someone chose the number 2 'Mostly Negative Impact' option, this might be because their regrets make them think about how their situation could be better if they had made different choices and results in an overall negative feeling.

OR: If someone chose the number 4 'Mostly positive impact' option, this might be because they consider their regret experiences to have been useful by helping them to move forward in a positive way.

_____

_____

_____

_____

_____

Note: If you have completed the above **Sections 1 and 2**, skip **Section 3** and go straight to **Section 4**.

Section 3. No Regrets.

The following question in this section should only be completed if you ticked the option *'I have no regrets'* in question 1, **Section 1**.

1) Please try to offer an explanation in your own words as to why you have no regrets *i.e.* what do you do to prevent things from becoming regrets.

For example: You may see every mistake you have made in your life as a learning experience and so you openly accept these mistakes without regretting the event. OR: You may be someone who doesn't think about the past much and so you don't dwell on mistakes long enough to feel regret for them.

_____

_____

_____

_____

Continue and answer **Section 4** and **Section 5** of the questionnaire.

Section 4. General Well-being in Life

1) Listed below are 7 items that describe how you might feel about your life in general. Each scale includes a pair of words that are considered 'opposites' (*For example: for item 1. 'Boring' is considered the opposite of 'Interesting'*).

Look at each scale carefully and circle the number that best describes how you feel about your life <u>at this point in time</u>.

For Example:
1. Boring   1   2   3   ④   5   6   7   Interesting
This response shows that the person considers their life to be 'in-between' boring and interesting (i.e. neither boring nor interesting).

I think my life is:

1. Boring	1	2	3	4	5	6	7	Interesting
2. Enjoyable	1	2	3	4	5	6	7	Miserable
3. Useless	1	2	3	4	5	6	7	Worthwhile
4. Friendly	1	2	3	4	5	6	7	Lonely
5. Full	1	2	3	4	5	6	7	Empty
6. Discouraging	1	2	3	4	5	6	7	Hopeful
7. Disappointing	1	2	3	4	5	6	7	Rewarding
8. Doesn't allow me to be my best	1	2	3	4	5	6	7	Brings out the best in me

2) Listed below is a scale that describes how you might feel about your life as a whole.

Look at the scale carefully and circle the number that best describes how you feel about your life <u>at this point in time.</u>

For Example: If you were mostly satisfied with your life as a whole, you would circle number 5.

I feel:

7	**6**	**5**	**4**	**3**	**2**	**1**
Delighted	Pleased	Mostly Satisfied	Equally Satisfied & Dissatisfied	Mostly Dissatisfied	Unhappy	Terrible

3) Listed below are 10 statements, which describe different feelings about yourself and your life. Read each statement carefully and then indicate how often you have these feelings <u>at this point in your life</u>.

1	**2**	**3**	**4**	**5**
Not at all	Occasionally	Some of the time	Often	All the time

For Example:
1. My Life is on the right track............................. 1 2 3 ④ 5
This response shows that the person has this feeling often i.e. they often feel that their life is on the right track.

---

1. My life is on the right track...............................1 2 3 4 5

2. I feel like a failure.. 1 2 3 4 5

3. Nothing seems very much fun anymore................1 2 3 4 5

4. I like myself..1 2 3 4 5

5. I feel as though the best years of my life are over 1 2 3 4 5

6. My future looks good...................................... 1 2 3 4 5

7. I smile and laugh a lot..................................... 1 2 3 4 5

8. I wish I could change some parts of my life............ 1 2 3 4 5

9. I can handle any problems that come up................1 2 3 4 5

10. My life seems stuck in a rut.............................1 2 3 4 5

Section 5. General Background Information.

We would like some general background information about you. Circle the number for the answer that is the most appropriate for you, or give details in the spaces provided.

What is your sex?   **Male** ◯   **Female** ◯   *Tick one*

What year were you born?   19____   *Write your answer here*

What is your highest educational qualification? *Circle the appropriate **number**.*

No school qualification......................1
School Certificate passes...................2
School qualifications, University
 Entrance and above......................3
Trade Certificate or Professional
 Certificate..............................4
University degree, diploma
 Or Certificate............................5

This is the end of the questionnaire.
Thank-you for taking the time to participate in this study.

APPENDIX B

All Regrets Listed by the Participants

Note: * indicates the most important regret

1

-I regret that I was too unattractive to find partners or a wife*

-I regret that I failed as a writer.

-I regret the 14 years I spent in Centrecare Community Trust psychiatric house with people wee below my intellectual ability

2

-I regret not staying at secondary school longer to gain more qualifications. I left high school ¾ of the way during my second year, 4th Form

-I regret not doing a nursing degree and becoming a nurse*

-I regret not being able to control my obesity

3

- Smoking cigarettes*

4

-I regret telling an old flatmate that no one liked her*

-I regret getting ridiculously hung up on an old boyfriend

5

NOT WILLING TO DISCLOSE

6

-Knowing a lot of people on a fairly superficial level but not fully committing myself to establish a proper relationship or maintaining that relationship*

-Not getting more involved in organised social events and activities, clubs, teams, sports etc.

-Spending and wasting money on clothes and current interests that I know I will soon get bored with or lose interest in, and know that they won't make me happier

7

-Having a one night stand with a friend*

-Not spending much time focusing on my studies

8

-I regret not being nicer to my parents when I was younger

-I regret not continuing in a sport I was successful at

-I regret becoming an alcoholic of sorts*

9
-I chose a boyfriend over my family and nearly broke my family apart*

-I regret moving to N.Z. and hence leaving behind my university degree in Cambridge England and leaving behind my friends. I left behind some amazing opportunities.

10
-I regret marrying as young as I did*

-Not taking more time in my youth to think about my future paths

11
-Saying stupid things to friends*

-Not standing up for myself when I was younger and not saying what I wanted to do

-Not eating better foods

12
-Not spending more time with my grandparents (my Dad's parents) and enjoying their lives when I was a bit younger

-Not participating in my younger brother's life and getting to understand him until recently*

-Not putting more effort into my studies and getting that little bit more out of it

13
NO REGRETS

14
-That I didn't stay a virgin till I got married*

-That I didn't learn to honour and respect my parents earlier in my life – only now that I live away from home. And now I don't get to spend as much time with them.

15
-Regret not taking a year off after 1st year. I didn't get into Med School and could have used some time out to sort out my next career choice*

-The way I handled the break-up of my previous relationship

-Delaying making voluntary repayments on my student loan – I could be nearly done by mow if I had started sooner.

16

-I regret not getting more involved with things when I was at school. Now I don't have those opportunities anymore

-I regret not seeing my grandad more before he died and for not introducing my boyfriend to him*

17

-Not studying for bursary exams until it was too late. Should have started a week earlier

-Talking about a friend behind their back because I wanted attention and didn't care how I got it*

18

-I regret not standing up to a fellow workmate sooner on a Xmas holiday job*

-Punching my pet goat in a moment of anger

-Not taking full advantage of a nearby golf course at secondary school

19

-I regret spending money then running out and having to ask my parents for help*

-I regret having a fight with my best friend years ago, although we made up I still feel bad

20

-I regret not staying at school and going to university when I was younger

-I regret not being able to save money and spending everything I have almost as soon as I get it*

-I regret that when my parents went overseas I did not be more thoughtful and offer to stay at their house and look after my grandparents

21

-Ruining a relationship that was "perfect" by cheating on my partner*

-Not taking all the opportunities I get to socialise and therefore limiting myself to a few close friends

-Always putting others feelings ahead of my own, when it means I am the one who ends up getting hurt

22

-I regret not spending more time with my grandmother while she was still alive

-I regret the harsh words I once spoke to my ex-boyfriend during an argument*

-I regret that I did not think more carefully about my course of study before I started it

23

-When my best friend got depression last year I struggled to deal with it and as a result our friendship changed and we have grown apart*

-I regret crashing my car a few months back. I caused both myself and others stress, and created many unneeded problems.

-I really wish I had played sports in my first 2yrs at uni, as when I played last year I got so much out of it

24

-I regret that I wasn't more thoughtful towards friends and my parents when I was growing up*

25

-Not spending enough quality time with my grandmother before her death*

-Just saying a quick goodbye/good luck to some schoolmates, who I may never see again, when I could have made a bit more of an effort.

26
NO REGRETS

27

-Having sex while very young – before marriage

-Being separated from my mother before I really wanted to get to know her. By then it was too late

-Not having a personal relationship with God before having children*

28

-There are a couple of people I wish I had been nicer to, especially an ex.*

-I regret not "experimenting" a little more with relationships before settling down

-I regret moving into this horrible flat (I wish my partner and I had moved into our own place THIS year)

29

-While getting ready for my wedding, my godmother's husband delivered our wedding present. I regret that I didn't take time to come out of my bedroom to thank him then and there*

30

-I regret a comment I made to an athlete I coached in the past when she was competing in a race

-I regret having a relationship with someone during my university years*

-I regret something I said to my grandmother when I was about 6 years old

31
-I regret small things like the extra slice of cake or yelling at my kids when I was tired

-I regret not having a good relationship with my mum. Being unable to talk with her about personal things*

-I regret not being able to express myself well in times of stress

32
-Being too harsh in disciplining our first child in his early years

-A personal lack of discipline in saving financially for retirement

-Being the driver of the vehicle my wife was killed in as a result of an accident caused by others*

33
-Moving to New Plymouth from Wellington. Enjoyed my life and friends in NP but regret that we moved for my husband to join the family business that cost us financially and emotionally*

-Regret being abrupt to my sister in law about a simple dog kennel in which she wanted off me, and she hasn't spoken to me in 2 years which I find very immature but I like keeping the peace so I feel now that I should have given it to her

-Not travelling on my OE before having children, as my friends all did. I continued to work

34
-Living in Masterton and mixing with the "wrong" crowd, lead me to a life of crime, drugs and other activities

-In 1998-99 I overdosed on a cocktail of hard drugs: Methadone, Morphine, Barbituates, Alcohol. I wasn't trying to top myself either*

-Not listening to a good friend before I overdosed. He told me to be careful how much I use

35
-Returning home from my OE early, or earlier than intended*

-Allowing an old friendship to deteriorate beyond repair

36
-Not doing things I had the opportunity/potential to do because of fear of failure or being worried about what others might think*

37
NO REGRETS

38
-Wearing a school uniform to a mufti day and being the only one

-Tipping a dessert on to a customers lap when waitressing

-Not using a large sum of money from a Trust account for anything but just blowing it on nothing*

39
-Treating my parents so badly when I was a teenager

-Letting my first love get away (even though I knew this person felt the same way)

-Putting weight back on after Id worked so hard to lose 20kg which took a long time*

40
-Not meeting my partner earlier on in my life*

-Not travelling before kids came along

41
-Not being very assertive and outgoing in lots of situations where I should/could have been*

-Embarrassing a friend by unintentionally (+ jokingly) insulting her in front of someone we hadn't seen in a long time

-Not talking openly with a friend about our relationship

42
-Not being able to spend time with my birth family now*

-Not being involved in my children's church activities when young and furthering their knowledge of the living God

43
-Not making the most of opportunities given to partake in sporting activities at university*

44
-I regret cheating on previous relationships with other guys*

-I regret not spending time or/and keeping contact with my past friends

45

-I regret getting into hard-out drinking in my 6th form and half way through my first year at T-Col*

-I regret the way I dealt with a particular friend in 4th form when we were having trouble as a group of friends – i.e. backstabbing her

46

-Sometimes I regret not persevering in some of my childhood sports and hobbies*

-Not having finished my thesis yet

-Not keeping in touch with friends more frequently

47

-Break-up of my first marriage and the effect it has had on my family – my wife's family, children and friends*

48

-I regret getting married at a very young age

-I regret that I didn't ensure that my two younger children developed good organisational skills. I feel I should have enforced good habits such as tidying rooms, doing regular chores, routines when they were pre-schoolers*

49

NO REGRETS

50

-I regret no being able to relax as a kid and enjoy more of my growing up years*

-I regret getting engaged to someone I didn't want to marry and the pain it caused everyone

51

-Not doing more extra-curricular/outside of school activities whilst at college

-Being too passive and non-proactive previously. It now reaches a point where it gets harder to learn stuff that others just assume you already know*

52

-Being awful to all my ex-boyfriends*

-Never having done gymnastics

53

-Making some choices that have compromised my value system, and let people push me around, rather than standing strongly on some issues*

54

-Having unprotected sex with a random person in a different country*

-Not accepting a job that was offered while working for another company in the same industry

55

-I regret having no career path and more especially not having a tertiary qualification*

-I also regret that I don't seem to have the energy and enthusiasm to do anything about my lack of qualifications

56

-That I did not go straight to university after UE in 1980

-That I did not have my leg that was broken in an accident reset properly

-That I was unable to do CPR to help my mother who collapsed and suffered irreparable brain damage after a massive coronary*

57

NO REGRETS

58

-I regret a very rebellious stage I went through as a child and told my mother I wanted to kill her and myself*

-I regret the structure of my degree I chose. I wish I had studied a BCOM/LLB instead of a BA/LLB and I regret having stuffed around at uni too much

-I regret not having spent as much time with deceased relatives while they were still in my life

59

-My sexual history (not doing things when given the opportunity)

-My sexual history (doing things when given the opportunity)*

-Not taking sporting opportunities offered at school

60

-Dropping out of university*

61

-Not getting married

-Listening to people's wrong advise*

62

-I regret not continuing through university

-Not using a condom when having sex*

63

-I regret not going through regular study when younger and more able i.e. school straight through to tertiary education*

64

-Starting smoking*

-Not spending more time with my father before he died suddenly

65

-I regret keeping a secret that allowed a child abuser to keep abusing. I promised 1 of the victims that I wouldn't tell*

-I regret not going to university straight out of school – when it was free

-I regret having a very heated argument with my sister in law

66

-Not completely sorting out my relationship with my father before he died*

-Not shearing a sheep when I had the opportunity

67

NO REGRETS

68

-Adolescent regrets – early loss of virginity, became involved in drugs and alcohol, rebelled against authority, not going to university straight after school (4)

-Early adulthood – drinking too much for too long, wanting to please everyone, working too much, not travelling more, wasting money (5)

-Current – not being more affectionate to husband, losing temper too often, not looking after body better (3)

69

-Ongoing – not ringing my grandparents often enough

-Treating a flatmate badly

-Not talking to (reintroducing myself to) an old high school sweetheart when the opportunity arose*

70

-The amount of partners I have had following a sexual abuse incident at 17*

-The stealing of money from my father

71
NO REGRETS

72
-Not choosing an alternative career path*

73
-Went out with my boyfriend

-Didn't try my best to study, or just pushing to do my best*

74
-Choice of career – not spending time when I was younger taking time out, having a look about instead of getting on the gravy train

-Financial – both specific i.e. debts that have been run up – and ongoing - inability to look after my finances properly

-Personal – the decisions I have made in relationships, allowing others to have treated me badly and believing blatant lies*

75
-Not pursuing a nursing career when I was younger*

76
-I regret that when I came into some money I chose to buy a rental property, when really I should have seen and talked to a financial adviser and put my money into bank investments*

-I regret not trying harder at school and making a decision at school of what I wanted to do when I grew up (left school)

-I regret being in a relationship (very long term) with a guy who cheated on me several times and I took him back each time. I should have left the first time it happened.

77
NO REGRETS

78
-I started smoking*

79
-I wish I had married a more organised forward planning tidy male. Some are definitely better at this than others*

-Not being able to study ballet and hopefully dance professionally

-Learning more about money – financial planning at a younger age

80
-Not exploring career options suitable for me and just doing a job*

81
-Not coming over to live in New Zealand sooner*

-Not going to Egypt, when I had the opportunity

-Getting engaged against my families wishes

82
-Not learning to surf when I was younger, now having difficulty learning at an older age. Not getting into more alternative sports instead playing cricket*

-Not telling my girlfriend I didn't like her and continuing on in the relationship until it became so difficult that she had to dump me

83
-As a teenager I distanced myself from my parents. Consequently I don't know them as well as I would like*

84
-Robbing my mother and step-father's house*

-Having sex before I met my finance

85
NO REGRETS

86
-Work – Not continuing voicing concerns/issues in internalising things when they could have been dealt with more effectively with communication

-Life – Spending 4 years of my life in a relationship that should have ended after 2; was afraid to face consequences*

-General – Passing responsibility of blame etc. to other people instead of accepting ownership of certain responsibilities and actions

87
-I regret using my student loan money to buy a guitar, a car and a whole lot of clothes

-I regret the times I have spoken unfairly about people*

-I regret the way I treated some ex-boyfriends

118

88

-I regret not saving part of my income when I was on a good wage. Trying to budget and save now is <u>much</u> harder

-I regret being overseas when my wedding was being planned and the problems that it caused between my husband and my mother

-I regret that I am nearly 30 and I don't feel that I have contributed to society or helped others as much as I might have*

89

-That I did not make use of all the opportunities/events that presented to me*

-I would like to think logically more rather than emotionally overreacting before speaking out

90

-Not making the effort to do more tramping/scenic walks while I had the physical capacity to do so

-Not finding out more about my mother and her thoughts/history before she died

-Not having had (been exposed to and/or absorbed) more Godly wisdom bringing up my children*

91

-I regret that I ever started smoking and continued smoking for 5-6 years

-I regret having a serious relationship with someone who was not really compatible with me and who I was never going to marry*

92

-Didn't know more about sex during my sexual experiences

-Didn't marry someone*

93

-That I didn't recognise and take opportunities to advance my professional and personal skills and abilities when they presented themselves

-That I did not acknowledge the significant input of certain people in my life and seek them out as mentors*

-That I could have valued some friendships more

94

-I regret getting married

-I regret going back to my husband*

95

-I regret starting to smoke cigarettes

-I regret not spending more time developing my musical talents*

-I regret not studying harder at university

96

-Being selfish with my last girlfriend, breaking up with her and treating myself bad*

97

-Leaving Northland after 6 years and coming back to live in Auckland*

98

-Regret leaving school early in 6th form. Wish I had tried harder in class, so I could have a job that I like more than the one at the moment*

99

-I regret not forming better friendships at school i.e. choosing a better group of friends as I mainly hung out with the bad boys*

100

-Not getting a graduate education after leaving high school*

-Not travelling before marriage

101

-Not having gone to university to further my education to enable me to have a more rewarding career

-Not having met my husband earlier and having consequently to wait to reaching an older age to have a child and having to rush to beat the 'clock' to have another child

-Spending my life listening to family hack on me for being overweight and consequently being eternally conscious of my size and not participating in activities I would have liked to*