

**Self-Regulation and Retirement:
How Regulatory Focus Affects Pre-retirement
Anxiety and Affect**

by

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work, that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Table of Contents

Declaration	1
Acknowledgements	2
Table of Contents	3
Table of Tables	6
Table of Figures	7
Abstract	8
Chapter 1 Introduction.	9
1.1 Aims and Objectives	14
1.2 Research Contributions	17
1.3 Layout of the Thesis	19
1.4 Chapter Summary	22
Chapter 2 Retirement	24
2.1 Introduction	24
2.2 Understanding Retirement	26
2.2.1 Retirement Decisions	28
2.2.2 Evidence for Retirement Decisions	33
2.2.3 Retirement Planning	36
2.2.4 Evidence for Retirement Planning Behaviours	43
2.3 Retirement Adjustment and Satisfaction	53
2.3.1 Predicting Retirement Adjustment/Satisfaction	57
2.4 Conclusion	62
Chapter 3 Self-Regulation	64
3.1 Introduction	64
3.2 Self-Regulation a Review	65
3.3 Introducing Regulatory Focus Theory	75
3.4 Regulatory Focus Influence on Decision Making	82
3.5 Regulatory Focus and Affect	87
3.6 Regulatory Fit	89
3.7 Regulatory Focus and Temporal Distance	94
3.8 Regulatory Focus and Construal Level	96
Chapter 4 Hypotheses Development	98
4.1 Introduction	98
4.2 Research Questions and Hypotheses	101
Chapter 5 Research Design and Philosophy	112
5.1 Introduction	112
5.2 Research Development	113
5.3 Methodological issues	116
5.4 Mixed Methods Design	118
Chapter 6 Study 1	122
6.1 Introduction	122

6.2	Instrument Design.....	124
6.3	Methodology.....	127
6.3.1	Participants.....	127
6.3.2	Procedure.....	128
6.3.3	Results and Data Analysis.....	130
6.4	Preliminary Discussion.....	136
Chapter 7	Study 2.....	142
7.1	Introduction.....	142
7.2	Research Design.....	144
7.3	Methodology.....	145
7.3.1	Participants.....	145
7.3.2	Procedure.....	146
7.3.3	Responses.....	147
7.3.4	Measurements.....	148
7.3.5	Retirement Strategies.....	150
7.3.6	Data Preparation.....	153
7.3.7	Missing Data.....	153
7.3.8	Data Screening.....	154
7.3.9	Data Analysis Strategy.....	155
7.3.10	Results.....	156
7.3.11	Hypothesis Testing:.....	159
7.4	Preliminary Discussion.....	162
Chapter 8	Study 3.....	166
8.1	Introduction.....	166
8.2	Research Design.....	172
8.3	Methodology.....	173
8.3.1	Pre-testing of Survey Tools.....	173
8.3.2	Procedure.....	174
8.3.3	Participants.....	175
8.3.4	Responses.....	176
8.3.5	Measures.....	178
8.3.6	Data Preparation.....	185
8.3.7	Missing Data.....	185
8.3.8	Data Screening.....	186
8.3.9	Data Analysis Strategy.....	187
8.3.10	Results Final Study.....	190
8.3.11	Hypothesis Testing:.....	208
8.3.12	Preliminary Discussion.....	220
Chapter 9	General Discussion.....	234
9.1	Application of Regulatory Focus Theory.....	235
9.2	Testing the New Set of Strategies.....	237
9.3	Assessing the Impact of Regulatory Fit.....	239
9.4	Contributions to the Current Theory & Research.....	243
9.5	Limitations and Future Directions.....	246

9.6 Practical Implications.....	249
9.7 Summary and Conclusion.....	253
References	256
Appendices	323
Appendix 1 Letter of Approval from DCU Research Ethics Committee	323
Appendix 2 Email permission from Director General of Organisation 1	324
Appendix 3 Invitation to participate in Study 1.....	326
Appendix 4 Survey Questions Study 1.....	327
Appendix 5 Example Word Trees	329
Appendix 6 Inter-rater Instructions.	331
Appendix 7 Inter-rater Scores	333
Appendix 8 Kappa Rating	334
Appendix 9 Word Frequency Results.....	335
Appendix 10 Permission from CEO of Org 2.	337
Appendix 11 Plain Language Statement and Consent for Study 2.....	338
Appendix 12 Survey for Study 2	340
Appendix 13 Correlation Matrix for General Regulatory Focus Measure for Study 2.	347
Appendix 14 Survey for Study 3.	348

Table of Tables

Table 2-1 Summary of Theories and Examples of Supporting Literature for Retirement Decisions (Shaded Grey) and Retirement Planning (Shaded Blue).....	48
Table 3-1 Summary of Theories underpinning Self-Regulation and examples of empirical evidence in relation to Retirement Decisions (shaded in fawn) and/or Retirement Planning (shaded in blue).	73
Table 4-1 Summary of Research Hypotheses.....	111
Table 6-1 Demographics for Study 1 Participants	128
Table 6-2 Word frequency results for question one on health	131
Table 6-3 Final Strategies	135
Table 7-1 Demographics Study Two Participants.....	146
Table 7-2 Retirement Preparation Strategies	152
Table 7-3 Item Factor loadings for General Regulatory Focus Measure	158
Table 7-4 Hierarchical Regression: GRFM Strength on Total Number of Promotion Strategies Chosen	162
Table 8-1 Summary of Hypotheses.....	171
Table 8-2 Demographics of Study 3 Participants.....	177
Table 8-3 Exploratory Factor Analysis for Major Scale Items in Study 3	192
Table 8-4 Item Factor Loadings for GRFM	195
Table 8-5 SCRAS Factor Inter-correlation and Cronbach Alphas'	197
Table 8-6 Item Factor Loadings for SCRAS	198
Table 8-7 Item Factor Loading for PANAS	200
Table 8-8 Item Factor Loadings for BIF Six Components Extracted	207
Table 8-9 Regression of GRFM Strength on Total Promotion Strategies Chosen	209
Table 8-10 Descriptive Statistics and Correlations Among Study variables	210
Table 8-11 Hierarchical Regression Model.....	214
Table 8-12 Moderation analysis for the DV of SCRAS	215
Table 8-13 Moderation analysis for DV of PA	216
Table 8-14 Moderation Analysis for DV of NA.....	218

Table of Figures

Figure 1.1 Final Model.....	16
Figure 1.2 Layout of Thesis.....	23
Figure 2.1 Layout of Chapter 2.....	24
Figure 3.1 Layout of Chapter 3.....	64
Figure 4.1 Layout of Chapter 4.....	98
Figure 4.2 Overview of the Changing Context of Retirement	102
Figure 4.3 Final Model.....	105
Figure 5.1 Layout of Chapter 5.....	112
Figure 5.2 Taxonomy of Theoretical Contributions for Empirical Articles [Taken from Colquitt and Zapata-Phelan (2007)]	114
Figure 6.1 Layout of Chapter 6.....	122
Figure 6.2 Example of Questions as they appear on Survey Monkey.....	129
Figure 6.3 Word Tree for Q5 Health Category 1 "exercise" prevention type ..	132
Figure 6.4 Word Tree for Q5 Health Category 1 "exercise" promotion type...	133
Figure 7.1 Layout of Chapter 7.....	142
Figure 7.2 Scree Plot for GRFM Exploratory Factor Analysis	157
Figure 7.3 Mean number of promotion strategies chosen	160
Figure 7.4 Mean number of prevention strategies chosen.....	161
Figure 8.1 Layout of Chapter 8.....	166
Figure 8.2 Structural Model	188
Figure 8.3 Scree Plot for GRFM Study 3.....	194
Figure 8.4 Moderating effect of strategies chosen on GRFM Strength - pre- retirement anxiety relationship (two way interaction with continuous moderator)	216
Figure 8.5 Moderating effect of type of strategies chosen on the GRFM Strength - Positive Affect (two way interaction with continuous moderator)	217
Figure 8.6 Moderating effect of type of strategies chosen on the GRFM strength-Negative Affect (two way interaction with continuous moderator)	218
Figure 9.1 Layout of Chapter 9.....	234

Abstract

Contemporary retirement research endeavours to identify the complex antecedents and consequences of retirement decisions and retirement planning. However, few research studies have examined how retirement decisions and planning behaviours have been implemented, nor has there been any significant research investigating the impact of the complex interactions that occur between individual traits and matching or non-matching strategic preferences on retirement outcomes. This research programme addresses these shortcomings by applying the theories of regulatory focus and regulatory fit (Higgins, 1997, 2000) to a model designed to examine the relationship between individual chronic motivational orientations and the means of pursuing retirement preparation strategies and their influence on pre-retirement anxiety and affect. In three studies a set of approach and avoidance strategies are elicited and tested as moderators of the relationship between an individual's chronic regulatory orientation, measured by general regulatory focus measure strength (GRFMS) and their pre-retirement anxiety (measured by the Social Components of Retirement Anxiety SCRAS) and positive and negative affect (measured by the PANA Schedule). Overall, the three studies support the application and adaptation of the regulatory focus and regulatory fit approach to a greater understanding of the interaction between motivational orientation and means of pursuing retirement preparation goals. Results indicate that it is possible to differentiate retirement preparation strategies into distinguishable groups of approach and avoidance strategies. Results also demonstrate that a "fit" versus a "non-fit" between chronic orientation and the type of strategies pursued can improve outcomes for those approaching retirement. Results from Study 3 shows that regulatory orientation coupled with the type of strategies chosen explained significant variance in pre-retirement anxiety and positive and negative affect. Specifically, the type of strategies chosen significantly moderated the relationship between regulatory orientation and both pre-retirement anxiety and negative affect. The moderation effect on the relationship between regulatory orientation and positive affect was not statistically significant. One unexpected result indicated that for chronic prevention orientated individuals a match might in fact exacerbate their negative reactions rather than decrease them. Results from this research helps to further explain the consequences of planning behaviours by demonstrating that a fit between individual differences and specific means of goal pursuit, as proposed by regulatory fit theory, does impact on outcomes such as anxiety and affect. The implications of these results, for research in retirement, self-regulation and questionnaire development, are suggested

Chapter 1 Introduction.

In the course of a lifespan an individual can expect, on average, to spend approximately fifteen years in retirement. For some, this may be as many as twenty years, or a quarter of their lives. Yet many individuals approaching retirement are poorly prepared for it and in some cases not prepared at all (Ekerdt, 2009). Research has considered retirement to be a process involving both the decision to retire and retirement planning, which does not take place at one particular time but may be something an individual goes through over a number of years. Current research in this field has focused on identifying individual, (e.g., Leung, & Earl, 2012) psychosocial, (e.g., Donaldson Earl, & Muratore, 2010) organisational, (e.g., Adams, Prescher, Beehr, & Lepisto, 2002; Wong & Earl, 2009) familial, (e.g. Leung, & Earl, 2012) and social normative factors (e.g., Feldman & Beehr, 2011; Henkens, & Van Dalen, 2007) that predict retirement decisions and planning behaviours. However, the individual level motivational processes underlying the approaches to goal pursuit during the retirement process has received scant attention. The present research aims to address this gap in the literature by identifying approaches individuals take to pursuing retirement preparation strategies. It seeks to illustrate how the relationship between these approaches and self-regulatory orientations impact on the outcomes individuals experience during their preparation for retirement. Specifically, it reveals that the levels of pre-retirement anxiety and positive and negative affect are more positively affected, if the manner in which an individual pursues their retirement preparation strategies sustains or fits their current regulatory focus.

Wang and Shultz (2011) suggest that individuals are unlikely to experience retirement in exactly the same way. They propose that the process of

retirement “is quickly evolving and shifting as the social, organisational, and societal contexts in which retirement takes place change” (2011, p. 1). We have seen how the retirement landscape in Europe has changed in the last six or seven years. As Hinrichs (2015) stated, “The 2008 financial market crisis, followed by the Great Recession and sovereign debt crises in several EU countries has triggered drastic reforms of old-age security systems” (2015. p. 4). These reforms have led to a lot more uncertainty surrounding retirement with the value of retirement benefits fluctuating and the qualifying age for state pensions being pushed out, particularly in the eight European countries that experienced the worst of the financial crisis during this time.

Despite the importance of retirement to employees, their families, employing organisations, and society in general, up to 2010 there was little in the way of a comprehensive review of retirement research in the management and organisational science literature since Beehr, 1986 (Wang & Shultz, 2010). Most reviews of retirement research have explored the antecedents and consequences of the retirement process through the lens of a number of psychosocial theories such as activity theory, career stage theory, continuity theory, lifespan development theory, and theory of planned behaviour (Topa et al., 2009; Zaniboni, Sarchielli & Fraccaroli, 2010). Wang, Henkens and van Solinges (2011) recent review of retirement adjustment suggested that while a lot of research has been conducted in recent decades to identify factors that influence retirement adjustment quality, the theoretical basis of most of those studies remains rather implicit, with few hypotheses explicitly formulated. The psychological impact of pursuing retirement preparation goals during the retirement planning process has received little attention. While a few studies have investigated anticipated retirement adjustment and wellbeing by using instruments that measure predicted feelings that individuals have towards their impending retirement (Floyd, Haynes, Doll, Winemiller, Lemsky, Burgy, &

Heilman., 1992, Taylor & Shore, 1995, Taylor, Goldberg, Shore & Lipka, 2008), there is little research that uses measurements of current feelings that are cotemporaneous with the retirement process.

Research, that has attempted to address these shortcomings, has typically relied on reviewing current literature and testing models to examine the relationships between retirement planning, retirement decisions and their antecedent and consequences (Topa et al. 2009). In their meta-analysis, the model Topa and colleagues tested “(a) confirms the overall pattern between antecedents and consequences, showing some “specialised” role for retirement planning (RP) and retirement decisions (RD); (b) suggests the multifaceted nature of the RD process, which is influenced by a large number of variables, mainly related to the work context; and (c) also suggests that consequences are more directly affected by RP than by RD” (2009, p. 49). They conclude however, that more empirical longitudinal research is required to confirm this model. Importantly it points out the importance of the retirement planning phase and its effect on retirement outcomes, which is the focus of this research programme.

Recent empirical research has addressed some of the points raised by Topa and colleagues and focused on identifying what variables impact on planning behaviours. However, the issue of “how” individuals pursue their retirement goals has not been addressed to any great extent. For example, individual differences, including personal attitudes, sense of control and social influence may influence retirement planning. However, this does not explain the issue of “how” individuals approach retirement goals. Some theoretical perspectives exist that explain how individuals construe actions and behaviours. Construal level theory (CLT; Trope & Liberman, 2010), for example, extends action identification theory (Vallacher & Wegner, 1987) to explain how any action can be identified in many ways, ranging from low-level identities that

specify how the action is performed to high-level identities that signify why or with what effect the action is performed. Therefore, construing retirement goals at a concrete low level of identity suggests that these goals will be pursued in different ways to retirement goals that are construed at a high level of identity. This concept is important for explaining differences in goal pursuit strategies. CLT proposes that as psychological distance increases, individual's mental construals become more abstract. As retirement for all individuals is a future event and this event will vary in temporal distance, which is an aspect of psychological distance, then individual's retirement preparation strategies, that are implemented to achieve their goals, will vary in levels of abstraction. These differences will in turn influence the impact that pursuing strategies in distinctive ways will have on retirement outcomes. This concept has not been addressed by the research to date. While Lynch, Netemeyer, Spiller & Zammit, (2009) applied CLT to retirement planning behaviours and showed how construal level affects individual's propensity to plan and this in turn influenced their spending patterns in the long and short term, it tells us little about the impact that pursuing specific strategies has on pre-retirement anxiety or affect. If we examine individual differences that influence how individuals pursue strategies we will get a greater understanding of what different pursuit strategies work for some and does not work for others.

The present research suggests that construal level is one individual difference that will influence goal pursuit. However, this research contends that self-regulatory orientation, as explained by regulatory focus, is the main individual difference that influences how individuals pursue goals. It does not mean construal level is not important. It is the contention of this research programme that the relationship between individual's self-regulatory orientation and their retirement preparation strategies will influence their levels of pre-

retirement anxiety and affect. The examination of the role of construal level will be included but only as one of an exploratory nature.

This doctoral thesis proposes to identify specific types of pre-retirement preparation strategies and show that, the manner in which individuals pursue these affects levels of pre-retirement anxiety and affect. Examining the relationship between strategies and how they are pursued will deepen our understanding of the factors that impact individuals, as they prepare for retirement. The current research proposes to examine these from a regulatory focus perspective (Higgins, 1997, Higgins et al., 2001). Regulatory focus theory (RFT) proposes that individuals differ in terms of their self-regulatory orientations. RFT promotion and prevention systems employ qualitatively distinct means of regulating towards desired end states as a result of socialisation and previous experiences. RFT suggests that individuals in a promotion focus state, versus a prevention focus state, will have different strategic inclinations. Thus, the manner in which individuals pursue goals will differ according to their regulatory orientation. Particularly, individuals in a promotion focus are motivated to use eagerness means to approach their new goals. In contrast, individuals in a prevention focus are motivated to use vigilance means when they approach new goals. The implications of this theoretical view is, that individuals who use strategies to pursue their goals that are in line with their regulatory orientation will have different experiences than those who pursue their goals that are not in line with their regulatory orientation. Specifically, regulatory fit theory proposed that the effect of regulatory fit on the value of a decision involves two important components: a “feeling-right” component and a strength-of-engagement component (Avnet & Higgins, 2006b). The feeling-right component is related to individual’s feelings about their decision activity, suggesting that the activity itself is experienced as being better when the manner of the decision making sustains or fits their

current regulatory orientation (Freitas and Higgins 2002; Higgins 2000). The strength-of-engagement component is related to the motivational force that individuals experience when making a decision, suggesting that individuals are more engaged in their decision responses (e.g., evaluative responses) when the manner of their decision making sustains or fits their current regulatory orientation. To my knowledge, no previous research has explored retirement planning behaviours from this perspective. Applying regulatory focus theory to a model that links chronic regulatory orientation to matching retirement preparation strategies offer the potential for deeper understanding of how an individual could maximise the positive outcomes of the retirement process and minimise the negative outcomes.

1.1 Aims and Objectives

The aim of the present research is to elicit and test a set of pre-retirement preparation strategies, building on regulatory focus theory (RFT) as described by Higgins et al. (2001), in order to build a deeper understanding of the processes that impact on levels of pre-retirement anxiety and affect.

The research employs a mixed methods design, which has been relatively absent from the retirement literature (for exceptions see Shacjklock & Brunetto, 2005; Proper, Deeg, & van der Beek, 2009). The mixed methods design adopted is a variant of the typical sequential two study design (Creswell, 2003), with a third study added to test the relationships proposed in the final model. In new or underdeveloped areas, it is common to apply qualitative methods in a preliminary stage, thus enabling the researcher to develop a conceptual framework, to generate hypotheses, or to establish the necessary tools (particularly instruments for measurement) for subsequent quantitative research (Lilford and Braunholtz, 2003; de Ruyter and Scholl, 1998; Morgan and

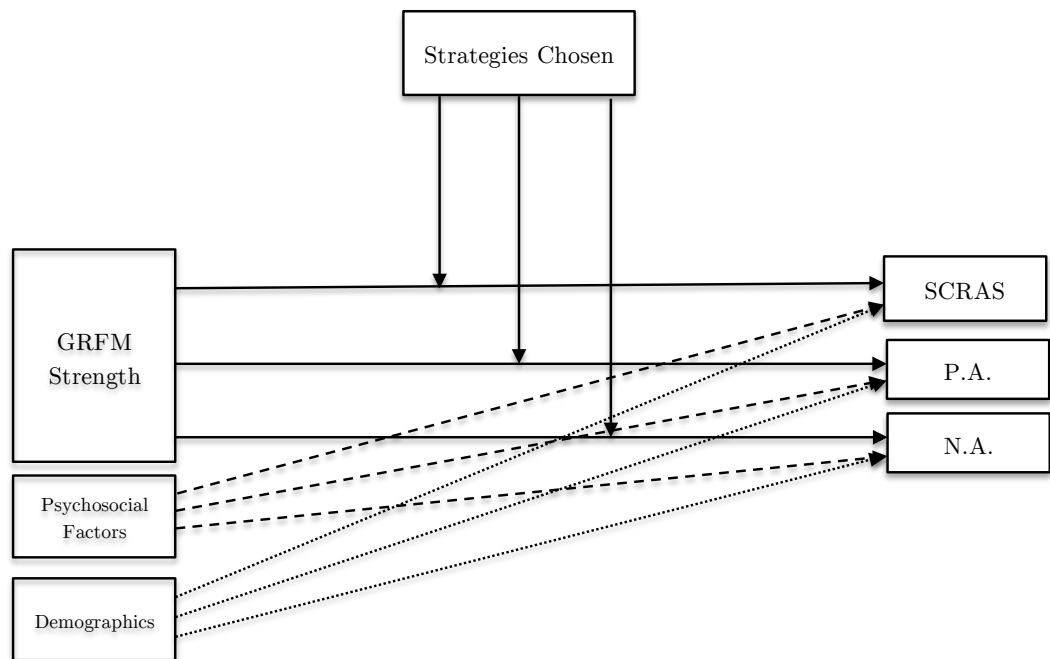
Smircich, 1980, in Srnka & Koeszegi, 2007). This is the approach adopted; with the identified research questions tested using three studies.

In Study 1 a supraliminal semantic word priming technique (Bargh & Chartrand, 2000; Higgins & Chaires, 1980) was employed to create an online open-ended questionnaire to elicit participant retirement preparation strategies that were distinguishable as either eager approach or vigilant avoidance type (Higgins et al, 2001). The approach taken to guide the design of the questionnaire is a mix of both inductive and deductive content analysis. An extensive review of the retirement literature was conducted to derive the deductive content of the questionnaire and from there a rigorous inductive content analysis is used to analyse the data collected. The resultant strategies were subjected to further inter-rater analysis to establish a set of distinct promotion focused and prevention focused retirement preparation strategies.

Study 2 was designed to test the set of strategies developed in Study 1. While Study 1 used a priming technique to elicit the strategies, it was important to establish that these strategies did in fact reflect a promotion and prevention focus. In order to do this the relationship between an individuals regulatory orientation and the strategies they would choose had to be tested. Study 2 randomly presented the set of retirement strategies to a cohort of employed individuals whose regulatory orientation was established by a chronic measure of the same (measured by General Regulatory Focus Measure GRFM). Study 2 therefore, both tested the chronic regulatory orientation measurement and verified the strategies elicited in Study 1 for use in the final study.

In Study 3, Higgins's regulatory fit theory (Higgins et al. 2001) is applied to the final model which includes chronic regulatory orientation, the pre-retirement preparation strategies from Studies 1 and 2, pre-retirement anxiety (measured by the Social Components of Retirement Anxiety SCRAS) and positive affect (PA) and negative affect (NA); (see Fig 1.1 below). Regulatory

fit theory proposes that motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one's orientation lends a subjective sense of importance to the activity. The fit, in other words, is the relationship between a person's orientation to an activity and the means used to pursue that activity. Regulatory fit theory is tested in the final model by assessing the impact of fit between chronic orientation (measured by General Regulatory Focus Measure GRFM) and the type of strategies chosen, taking into account the mediating effect of construal level, on the feelings of pre-retirement anxiety and positive and negative affect.



Solid lines represent interactions between main model variables.

Dashed lines represent interactions between psychosocial control variables and dependent variables.

Dotted lines represent interactions between demographic control variables and dependent variables.

Figure 1.1 Final Model

1.2 Research Contributions

This research makes four contributions to current retirement research and theory. These are briefly outlined here and a fuller description and discussion of these contributions is provided in the final chapter of this thesis (Chapter 9).

The first contribution that this research provides is the creation of a set of eager approach and vigilant avoidance retirement preparation strategies for the first time. This extends previous taxonomies of retirement preparation strategies by adding the additional categorisation provided by applying RFT to these strategies and distinguishing between eager approach and vigilant avoidance type. This new set of retirement preparation strategies will allow more extensive investigations into the procedural aspects of planning for retirement. For a fuller discussion see Chapter 9.

The second contribution this research makes is that it expands the self-regulatory theory and research further in the retirement area. Results from this research thesis demonstrate that chronically orientated individuals prefer strategies that are in line with their chronic regulatory focus. These results imply that RFT theory can add an additional layer of explanation to the type of strategies that individuals choose when planning and preparing for retirement.

The third contribution made by this research is that it demonstrates that a fit between an individual's chronic regulatory orientation and the type of strategies chosen impacts on their feelings regarding their impending retirement. This extends our understanding of how an individual can maximise the positive outcomes of the retirement process and minimise the negative outcomes. In addition to this, it also extends our understanding of the processes of self-regulation and regulatory fit. In particular it demonstrates that the impact of a

fit versus non-fit between individual's chronic regulatory focus and their means of goal pursuit does not always have a positive effect. The results of the final study, in the present research, show that when the relationship between chronic regulatory orientation and means of goal pursuit match they result in an intensification of both positive and negative reactions. This has particular implications for individuals that are prevention focused and who pursue prevention type strategies, as they showed more sensitivity towards the negative items contained in the measurements used for anxiety and negative affect, despite the fit between their orientation and the type of strategies pursued. This expands our understanding of the prevention self-regulatory processes involved in goal pursuit. This addition to the research helps to further explain retirement planning behaviours by demonstrating that the fit between individual differences and specific means of goal pursuit does impact on outcomes experienced by individuals in line with regulatory fit theory. For more details see Chapter 9.

The final contribution made by this research is that it adds to the research on retirement planning and explores the issue from a current perspective rather than an anticipated perspective. It utilises a measurement of pre-retirement anxiety called the social components of retirement anxiety scale (SCRAS) and the positive affect, negative affect schedule (PANAS) to explore how individuals feel in the present about their impending retirement. Previous studies have relied on predictive measurements for anticipated retirement satisfaction to assess the impacts of various antecedents of retirement planning. By examining current feelings, as against predictive measures, the theoretical and conceptual issues of relying on individuals to think in to the future about what they might feel about their retirement is removed. This allows for a deeper understanding of what impact behaviours associated with retirement planning

have on individuals as they progress through the retirement process in preparation for eventual retirement.

In general, this research demonstrates the need to account for individual differences and their corresponding strategic inclinations while also attending to the full range of complex factors that influence the retirement process. The model proposed suggests this could be achieved by applying a framework that includes these individual differences, inclinations and multifaceted features.

1.3 Layout of the Thesis

This thesis is organised into 9 chapters. Chapter 1 provides an introduction to the research carried out. Chapter 1 also provides an introduction to the topic of retirement and an overview of the aims and objectives of the research. The contributions made by the research are outlined towards the end of this chapter.

The next 3 chapters provide the literature review and the development of the hypotheses. This begins with 2 chapters dedicated to the review of the literature. First, Chapter 2 commences with an overview of the historical nature of retirement and the evolution of the research that has led to a reconceptualisation of retirement as a process. This chapter points out the changing nature of research in the retirement literature and indicates the continuing need to develop new models and associated measurements to capture the complex processes and factors involved in retirement decisions, planning, satisfaction and adjustment. The review identifies a gap in the current research models being employed to identify the antecedents and consequences of the retirement process. The implications for the current research are outlined and a new theoretical model is proposed.

Chapter 3 builds on the work of Chapter 2 and reviews the literature regarding the theory of self-regulation and introduces and reviews the case for regulatory focus as having the potential to advance our conceptual knowledge of “how” retirement planning behaviours are pursued. This contention is the focus of the later sections in Chapter 3, assessing the relationship between regulatory focus and decision making in general and its implications for retirement decisions in particular. This chapter also examines the impact that the retirement process proposed by the new model has on the outcomes measured. Chapter 3 also introduces the concept of regulatory fit. This conception and its implications for the final part of the current research are outlined. The final part of Chapter 3 reviews the nature of regulatory focus measurement and develops the proposal made in Chapter 2 regarding the need of an alternative measurement of retirement preparation strategies. A model of retirement planning behaviours integrating regulatory orientation, the moderating effect of type of strategy pursued and pre-retirement anxiety and affect is proposed. The final chapter of this section, Chapter 4, defines the research questions developed from the interactive nature of the concepts outlined in the earlier chapters and develops the hypotheses for the present research.

The final five chapters of the thesis detail the approach taken in carrying out the research and discuss the conclusions reached. Chapter 5 outlines the design of the overall research agenda and explains the philosophical premises that underpin the research programme. Chapter 6 outlines the specific methodological approach taken in the design of Study 1, the qualitative survey designed to elicit retirement preparations strategies by utilising a priming technique. The procedure is described and the results are outlined and analysed. The resultant strategies are presented and a preliminary discussion is delivered. Chapter 7 describes Study 2, designed to test the instrument developed in Study 1, utilising a sample of employees in a large Irish public sector

organisation. The chapter outlines the design of a quantitative survey and describes the methodological approach and procedure followed. Other methodological issues are discussed including the handling of missing data; data screening and the data analysis strategy are described. The results are presented and analysed and the first of the hypotheses presented in Chapter 4 are tested. A preliminary discussion of the results of Study 2 is offered and the implications for the final study (Study 3) are delineated.

Study 3 is described in Chapter 8. This study takes the model proposed in Chapter 4 and, with the measurement instrument developed and tested in Study 1 and 2, another quantitative survey is circulated, this time to employees of a large Irish civil service organisation. Again, the design of a quantitative survey and the description of the methodological approach and procedure followed are outlined. A description of the instruments included in the survey are detailed and other methodological issues are discussed including the handling of missing data, data screening and the data analysis strategy. The results are presented and analysed, including the testing of the factor structure of the measurement model, and the hypotheses developed in Chapter 4 are tested. A preliminary discussion of the results of study three is presented and the implications for the current retirement literature are offered.

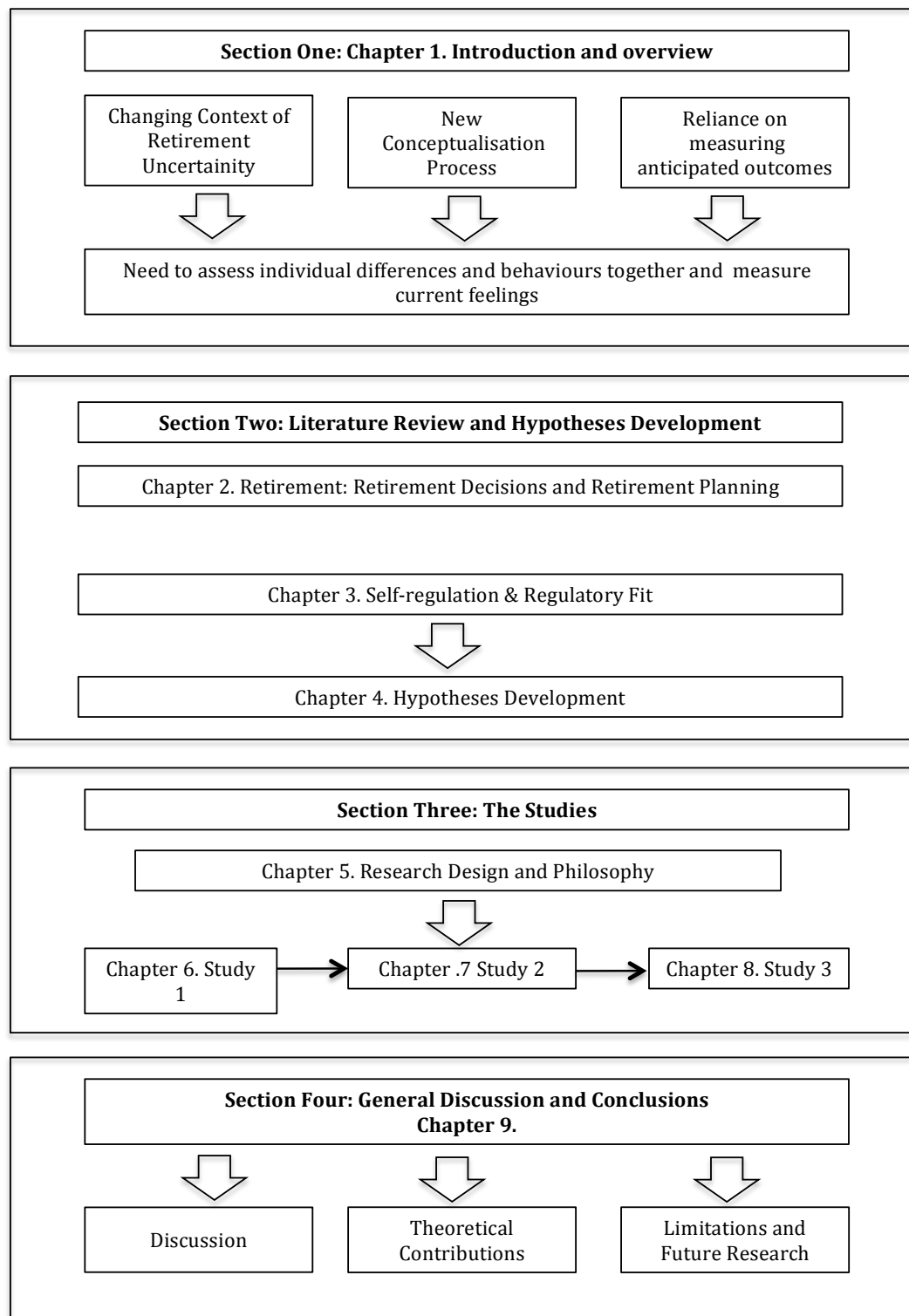
The final chapter (Chapter 9) provides a general discussion of the three studies and explores the implications of the findings of the research for the existing models that exist in the current psychological literature on retirement. It also restates the contributions of the research to the current literature on retirement and self-regulation while considering the limitations of the research programme. Suggestions for future research are proposed and the practical implications that this research implies are discussed.

For a pictorial representation of the layout of the thesis and how the conceptual model for the research is constructed from the literature review see Fig 1.2 below.

1.4 Chapter Summary

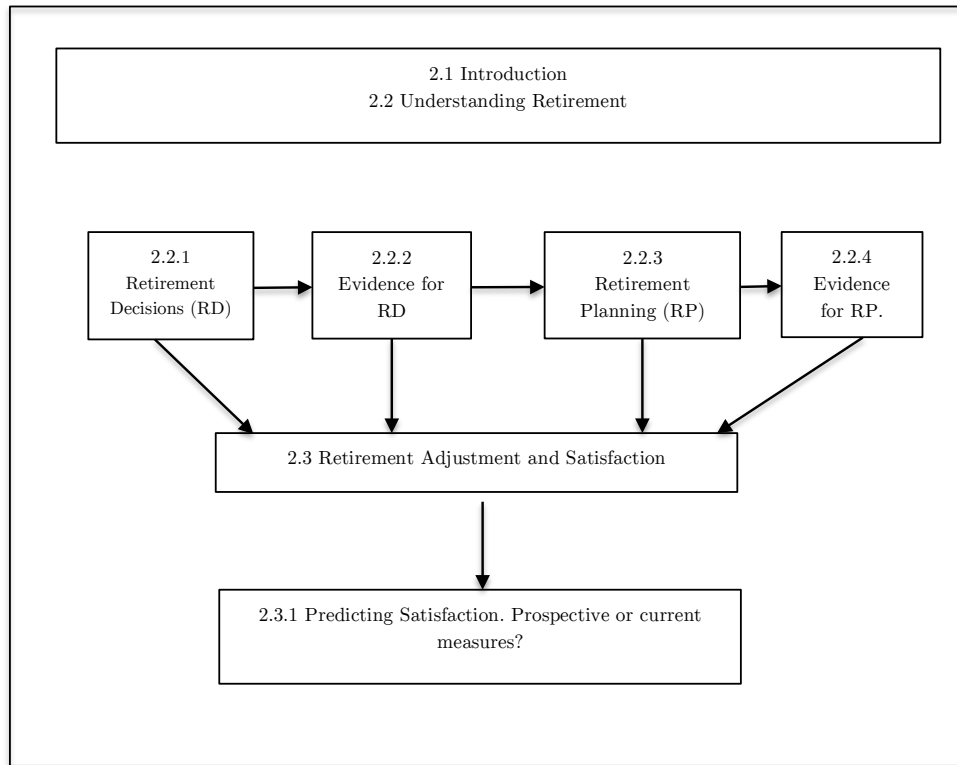
This chapter provides an overview of the three component studies that comprise the current research programme. Commencing with a brief discussion of the current state of the retirement literature the requirement to continually create ways to adequately measure retirement planning behaviours and their implications for retirement satisfaction and adjustment were highlighted. The aims of the research and the importance of its contributions to the current literature were presented. The specific research questions arising from the review of the literature were summarised and finally the structure and layout of the thesis was provided. The following chapters detail the review of the literature carried out in advance of the current study. This review begins with an overview of the state of research and conceptualisation of retirement at present.

Figure 1.2 Layout of Thesis



Chapter 2 Retirement

Figure 2.1 Layout of Chapter 2



2.1 Introduction

As individual's can expect, on average, to spend approximately fifteen years or more in retirement, one would expect that preparing for retirement would be a priority. However, research suggests this is not the case and, in fact, many approaching retirement are poorly prepared for it (Ekerdt, 2009). Prior to 1900, retirement was practically non-existent for most workers. It was only with the introduction of 'welfare payments' for retired individuals, from the middle of the twentieth century, that retirement became a realistic possibility in many western countries. In recent years, many western governments have shifted from promising citizens earlier retirement to imposing later retirement

commencement ages, as economic conditions demonstrated the complete underestimation of the cost of these ambitious plans. Now the “landscape of retirement is in flux and riddled with uncertainty” (Shultz & Wang, 2011 p2). These changes have led to a shift in the focus of research in the retirement literature. Early research focused on retirement decisions, emphasised the negative aspects of leaving the workplace (Cumings and Henry, 1961). The focus changed in later research and aspects of an individual’s experience prior to leaving the workforce was accounted for (Atchley, 1976, 1989). The idea that retirement was more than just about making a decision to retire, but rather that it was a process involving both making the decision to retire and carrying out some retirement planning activities was introduced at this time (Beehr, 1986). The focus of this research has been on identifying the antecedents and consequences of retirement decisions and retirement planning behaviours. However, it has not examined “how” strategies to achieve planning behaviours for attaining things like good health, appropriate financial security, leisure activities etc. are implemented. While some research has identified the strategies involved, it has not examined the relationship between individual motivational orientations and means of goal pursuit to explain how different approaches may better explain how individuals can maximise positive outcomes and minimise negative ones.

The focus of the research programme reported in this thesis seeks to address this shortcoming by examining the impact of regulatory focus on the choice of retirement planning strategies and how this influences their pre-retirement anxiety and feelings of positive and negative affect. A key tenet of regulatory focus theory (Higgins, 1997) is that goals or strategies can be described as, either promotion focused, eager approach type or prevention focused, vigilant avoidance type. Promotion focused goals are concerned with achieving hopes, wishes, and aspirations, and are thus likely to involve an eager

approach strategy. Prevention focused goals, on the other hand, involves a vigilant avoidance strategy and is concerned about duties, obligations, and responsibilities (Higgins, 1997). To explore the impact that pursuing different strategies may have on outcomes from retirement preparation it is important to review the current theoretical and research literature on retirement. This will position the research programme against current conceptualisations of retirement. The literature reviewed in the following sections demonstrates that, despite its extent, and to the author's knowledge, no previous study has examined "how" strategies to achieve retirement goals are implemented. It is the contention of this research that individual's chronic regulatory focus influences their method of retirement preparation goal pursuit by eagerness approach or vigilant avoidance means. By employing regulatory focus theory, a deeper understanding of "how" individuals can maximise their retirement satisfaction and well being, beyond just knowing what factors influences them, will be accomplished.

The following sections of this chapter look at the conceptualisation of retirement, as a process involving decision-making and retirement planning. A number of psychosocial theories are reviewed to help understand the complex nature of this process. The gaps in the literature are identified and the final section of the chapter examines the state of the research regarding consequences of retirement decisions and planning on adjustment to, and satisfaction with, retirement.

2.2 Understanding Retirement

The retirement landscape in the 21st century is very different from that of the 20th century. During the 20th century, great strides were made to ensure

individuals that came to a certain age had the opportunity to retire should they so desire. In the late part of that century and the early years of the 21st century, the primary focus many governments and employee representative bodies had was to find more ways for individuals to retire earlier and in better financial circumstances. Pension and retirement packages were designed with this purpose in mind. Public sector jobs offered packages with defined benefits, tax relief on contributions and tax free lump sums at retirement, as the norm. Some private sector employers adopted the same approach while others opted for risker defined contribution packages, with the attraction of possible pay offs at retirement of multiples of what the defined benefit products were offering. However, following the economic crash in the middle of the first decade of the 21st century, the landscape has altered significantly. While there are still significant numbers of individuals who enjoy the security of the defined benefits packages, mostly in the public sector, for the rest of workers the future of their pensions and retirement packages are far from certain. This has led to a growth in the retirement research, from an economic perspective, which seeks to understand the impact that these factors will have on the antecedents and consequences of retirement decisions and retirement planning.

Retirement can no longer be defined as the end of work for individuals, as the changing economic circumstances mean that more retirees choose to work part-time perhaps for their current employer or part-time or fulltime for a new employer. Some choose to become self-employed to give them greater control over the amount of work in which they choose to engage (Feldman, 2007). Researchers in the behavioural sciences are better positioned to explore the nature of the retirement process as these changing circumstances involve more than financial considerations.

The following sections will explore the theoretical approaches that underlie the retirement decision process. After the decision to retire is taken the

process of planning for retirement takes precedent for some, while others do very little in terms of preparation for retirement. The processes underlying this phenomenon will also be explored later in this chapter. The transition to retirement and how individuals adjust to retirement will also be examined.

2.2.1 Retirement Decisions

A number of psychosocial theories assist our understanding of the complexity of the retirement process. Retirement, from a decision-making perspective, is seen as a major life event and, as such, suggests there are a number of psychosocial processes underlying the decision to retire (Topa et al., 2009). Historically, three theories that are widely quoted in the literature regarding retirement behaviour are disengagement theory, continuity theory and activity theory. The disengagement theory of old age suggests that “growing old involves a gradual and inevitable withdrawal or disengagement resulting in decreased interaction between an aging person and others in the social systems that they belong to” (Cumming and Henry, 1961:14). Viewing retirement from this perspective posits that retired individuals engage in a process of withdrawal from the workplace and also from their established place in society (Hershenson, 2014). For some individuals, this may be a difficult move to make. The continuity theory of old age, on the other hand, suggests that older individuals attempt to preserve consistent life patterns in order to maintain feelings of self-worth and wellbeing (Topa et al., 2009). Individuals, therefore, try to maintain the same routines before and after retirement in order to mitigate unwelcome disruption, thereby making the decision to retire an easier one (Atchley, 1989). These two theories can be considered as opposite poles of a continuum with most individuals falling somewhere along the continuum. Given the economic and societal changes mentioned earlier, and the negative outcomes predicted,

disengagement theory has received less research support than continuity theory (Topa et al., 2009).

The activity theory of old age (Adams & Taylor, 2015; Havighurst, 1961,) posits that some individuals strive to achieve continuity between different aspects of their lives by engaging in higher levels of participation, both in social and leisure activities. Replacing work roles for other roles promotes wellbeing in older adults particularly when work roles must be relinquished through retirement. This premise is that retired individuals adjust better to retirement if they stay actively involved, both in physical and social activities. However, the theory has received some criticism for stigmatising individuals who see retirement as an opportunity to live at a slower pace and who may not actually have access, or the financial resources, to pursue such activities. Assessment of resources and the strength of one's social network may impact on the retirement decision.

There are a number of other theories that have been utilised by researchers in the retirement field to try and get a deeper understanding of the processes involved in retirement decisions. For example, the stabilisation theory of old age (Maynard, 1974) suggests there may be a middle ground between disengagement theory and activity theory. It posits that as individuals move into old age, they take stock of their lives and choose to remain fully engaged in those activities, interests, and attitudes, with which they are comfortable, but disregard the rest.

Social psychological theories also offer some insights on retirement decision-making. Social identity theory, for example, states that an individual's sense of who they are is based primarily on their group membership(s) (Tajfel, 1979). Making a decision to become a member of a specific group, retired people in this case, will depend on the individual's image of the group. Social normative theory suggests that individuals conform to normative social

influence, behaving according to what they perceive to be acceptable to the group they wish to belong to, and not necessarily because they believe or want to do it themselves. Decisions regarding the socially acceptable age to retire at may influence the individual's retirement decision (Hershenson, 2014). Role theory (Richardson, 1993) posits that individuals have several roles in their lives and that each role is a set of behaviours defined by the expectations that other people related to that role have for them. Preparedness to move from the current role of worker to a new role (retiree) and the adoption of a new set of attitudes and behaviours expected of them, can influence an individual's decision to retire. In an extension of role theory, work role attachment theory, Carter and Cook (1995) suggest that the degree to which individuals are committed to their work-role influences their desire to remain a member of the workforce.

More recent conceptualisations of retirement consider it as part of the normal development of an individual's career. These conceptualisations are based on stage theories of development, such as, for example Erikson's (1963,) eight stages of development, with individuals transitioning between different life stages as a normal process. Seen in this light, retirement is considered the final stage of a career and a natural transition into old age. The retirement stage is not necessarily tied to a particular age. It does help to explain some decisions regarding retirement as movement across stages are driven by an individual's perception of their career and life stages (Feldman and Beehr, 2011). It is also important to consider stage theories of development in tandem with social normative theories, work role theories and personality theories. Work centrality, the importance an individual places on his/her work and attachment to it, influence decisions regarding when to retire. Personality theories such as McCrea and Costa's (1999) five-factor theory of personality help explain why some individuals develop greater work centrality and attitudes to retirement.

The five factor theory of personality states that individuals can be characterised in terms of relatively enduring patterns of thoughts, feelings, and actions, and that these traits can be quantitatively assessed to show some degree of cross situational consistency. Looking back at continuity theory, the five factor theory of personality suggests that continuity in roles and behaviours are important also to maintain these enduring patterns of thoughts feelings and actions. Therefore, from these perspectives, individuals should have enduring traits that can be measured and provide us with an opportunity to assess the impact of such traits on their actions with regards to retirement planning.

However, individuals are also adaptive and, therefore, may be more directive regarding the course of their career and ultimately the timing of their retirement. Hall and Moss (1998) defines self-directedness as “the ability to be adaptive in terms of performance and learning demands”. Their “Protean Career Attitude” theory points out that self-directedness is an attitude reflecting a feeling of personal agency regarding ones career that “does not imply particular behaviour, such as job mobility, but rather it is a mind-set about the career” (1998, p. 6). Individuals with a self-directed career attitude, experience greater responsibility for their career choices and opportunities and are more actively engaged with their career development. Future time perspective (Lewin, 1942; Zimbardo, 1990) explains the degree to which and the way in which the future is anticipated and integrated in the psychological present of an individual. Anticipating retirement for all is a future event and some individuals, such as those striving to achieve continuity between their work life and their life in retirement, may possess the mind-set suggested by future time perspective.

In summary, researchers in the retirement field have applied the theoretical perspectives outlined so far. They have sought to explain some of the complex factors that are involved in retirement decisions. According to these perspectives, decisions regarding retirement range from how best to withdraw

from work, while preserving the life patterns and social relationships that feel good, rejecting the rest, and doing it actively and purposefully. Some decisions are believed to be based, in some part, on how individuals view retired people in general and how they should behave in ways that are socially acceptable as a retired person. Retirement is regarded as a stage in life that can be considered as a normal and natural part of one's transition into old age, that is pursued in different ways depending on an individual's personality, their mind-set and the way in which they anticipate their future retirement satisfaction and well-being (for a summary see Table 2.1).

It is clear from the numerous theories and perspectives employed in retirement research that retirement decision-making is a very complex concept. Despite the application of these theoretical perspectives, the complex interaction between the antecedents of retirement decisions such as health, satisfaction with life, satisfaction with work etc. and the self-regulatory motivational processes involved in making and carrying out these decisions, has not received much attention to date. Understanding why individuals make certain decisions, with regards to their retirement preparation, is very helpful for organisations, HR specialists, representative groups and individuals. However the theories, outlined above, do not address fully the impact that the interaction between individual motivational orientations and their antecedents could have on retirement satisfaction and well-being. This research thesis addresses this by examining retirement decision making from the perspective of "Approach-avoidance motivation theory", otherwise known as "Regulatory focus" theory (Higgins, 1997, 1998, Higgins et al., 2001). Higgins (1998) theory of regulatory focus is fully explored in Chapter 4. The core assumption of this theory is that there are two distinct regulatory systems: approach motivation and avoidance motivation. Individuals with approach motivation exhibit high vigilance for positive stimuli and strong behavioural tendencies to pursue positive stimuli (Hamamura,

Meijer, Heine, Kamaya, & Hori, 2009). In contrast, avoidance motivation is a general sensitivity to negative stimuli in the environment and a strong behavioural tendency to avoid aversive stimuli (Elliot & Harackiewicz, 1996). With regard to retirement decision making Feldman and Beehr (2011) suggest that individuals with approach motivation are more likely to become highly involved in their jobs because they engage in more “activating behaviours” that help them achieve their goals at work (Elliot & Thrash, 2002). On the other hand, individuals with avoidance motivation are more likely to seek out retirement both because they are more sensitive to negative cues in the work environment and because they strive more fully to avoid situations in which there might be conflict (Elliot & Harackiewicz, 1996).

Regulatory focus also offers exciting potential to extend our knowledge of retirement planning behaviours and help us to understand how an individual can maximise the positive outcomes of the retirement process and minimise the negative outcomes. These are explored in detail in future sections of this chapter. Some of the psychosocial theories developed over the last sixty years or so have been described above and some of these have been employed by retirement researchers to help understand some of the processes underlying the decision individuals engage in when it comes to considering retirement. Evidence for these contentions is outlined in the next section of this chapter. Following this section, the prevalence of retirement planning is explored.

2.2.2 Evidence for Retirement Decisions

Support for psychosocial theories vary from propositional to empirical studies reported in the retirement literature. Feldman and Beehr (2011) presented a “Three-Phase Model of Retirement” that looked at retirement decision making as “Imagining the Future” (Phase 1), “Assessing the Past”

(Phase 2) and “Transitioning into Retirement” (Phase 3). (2011, p.2). Each phase’s needs are explored with reference to a number of different psychological theories, including disengagement and continuity theory. Feldman and Beehr suggest that the more negative view of retirement decision making suggested by Disengagement Theory asserts that the retiree has no meaningful place in society because there is no clear and positive “script” for the retiree life role (2011, p.4). When exploring “Phase 2” of their model, Feldman and Beehr looked at retirement as a phase in an individual’s life and career rather than a discreet event; one that offers new opportunities for growth and development. They asserted that stage theories (e.g., Barnes-Farrell, 2003; Erikson, 1963; Levinson & Wofford, 2009) and employment stage theories (e.g., Super, 1953, 1957, 1990) characterise retirement as a disengagement from and decline in work activities. Feldman and Beehr suggest this is also influenced by what older workers perceive as the norms about appropriate retirement age. Social-normative theories suggest that social influences affect retirement decisions (Schlossberg, 1981; Schlossberg et al., 1995 in Feldman and Beehr, 2011).

Work-role attachment theory suggests that work-role variables such as job involvement, organisational commitment and career commitment, impact on retirement decisions. Research in this area has delivered mixed results. For example, Adams et al. (2002) found that organisational commitment was negatively related to retirement intent, while job involvement displayed a positive relationship and career identification had no relationship with retirement intent.

Commitment to leisure activities has been shown to significantly predict retirement intentions (Schmidt and Lee, 2008). Older workers may become more involved in activities outside the workplace as they begin to sense their work-role is a diminishing component of their self-identity. This suggests that individuals involved in activities outside the workplace are more likely to hold

positive attitudes about the retirement lifestyle. As such involvement in structured leisure activities may allow individuals to maintain their membership in important social networks and focus their energy on performing well in valued tasks, which could allow them to sustain a sense of continuity in their identity and daily routines (Atchley, 1993; De Vaus & Wells, 2004; IsoAhola, Jackson, & Dunn, 1994).

Beehr and Glazer et al. (2008) researched work and non-work predictors of retirement age and found that, after controlling for finances, gender, and health, a set of work characteristics (especially being tired of working) and a set of non-work characteristics (e.g., health insurance, social activities, caring for someone, and expected retirement activities such as employment activities) predicted decisions about retirement age. This suggests that individuals are forward-looking; they are pulled toward retirement more by what they believe awaits in the future after retirement than pushed away from work by thoughts of the current workplace. Other research that supports Beehr and Glaser et al.'s (2008) contentions suggests that these non-work characteristics are important considerations for individuals who are preparing for retirement. For example, health greatly influences the retirement decisions of older workers (Topa et al., 2009).

This section has highlighted the complex nature of retirement decisions. The decision to retire is typically the first step in the retirement process and explanations offered for those decisions are varied. Implicit in the explanations reviewed is that retirement is a major life event, and for some, the final stage of development in their lifespan. As such, it would seem logical that taking the decision to retire, individuals would prioritise preparation for the impending changes to their lifestyle through self-directed planning behaviours. For example, research into retirement planning (Petkoska and Earl, 2009; Noone, et al., 2010) demonstrates that an individual's health in retirement is typically

influenced by both current and previous health practices (Breslow, Reuben, & Wallace, 2000), suggesting the need for individuals to plan for their health in retirement by engaging in health-promoting practices well in advance of their retirement. These and other retirement planning behaviours and the theoretical foundations for them are explored in the following sections.

2.2.3 Retirement Planning

A review of the research literature on retirement planning reveals that the term “retirement planning” is used to refer to both “planning to retire”, implying a decision or timing of retirement and ‘retirement planning behaviours’, implying an agentic process (Bandura, 2001) that includes notions such as forethought, intentionality, activity and self-regulation. The next two sections focus on research that refers to retirement planning behaviours that specifies actions or behaviours as decisions and timing of retirement was covered in the previous two sections of this chapter.

The decision to retire is typically the first step in the process of retirement. As suggested earlier, implicit in the explanations reviewed is that retirement is a major life event, and for some, the final stage of development in their lifespan. As such, it would seem logical that taking the decision to retire, individuals would prioritise preparation for the impending changes to their lifestyle through self-directed planning behaviours. However, initial research failed to support this contention. Ekerdt, Hackney, Kosloski, and DeViney (2001) for example, found that individuals are not involved or indeed far-sighted when it comes to retirement planning, despite other research which points to the positive effects of future planning for life satisfaction (Prenda & Lachman, 2001). More recent research (Topa et al., 2009, for example) revealed a significant relationship between retirement planning behaviour and retirement

satisfaction. Also, evidence suggests that retirement preparation promotes better adjustment to retirement (Ebersole & Hess, 1990; Mutran, Reitzes, & Fernandez, 1997; Noone et al., 2009). This section will examine the theoretical framework surrounding retirement planning behaviours and the implications these have for pre-retirement planning in particular. The next section (2.2.4) will outline the support for these contentions in the current literature.

The idea that individuals make rational choices regarding planning for their retirement is not borne out in the research to date. Rational Choice theory (Coleman, 1986, 1990) suggests that patterns of behaviour in societies reflect the choices made by individuals as they try to maximise their benefits and minimise their costs. In other words, individuals make decisions about how they should act by comparing the costs and benefits of different courses of action (Davis, 2007). From a cognitive psychology perspective, individual's behaviours and decisions are made within the limits of their abilities known as "procedural rationality". Economists think in terms of "substantive, objective rationality", where individuals choose from numerous options when making decisions, and select the option that has the "highest utility" after carefully weighing the advantages and disadvantages of each option. However, alternative views suggest that individuals do not function in this fashion. Bounded rationality theory suggests that "behaviour that is adaptive within the constraints imposed both by the external situation and by the capacities of the decision maker" (Simon, 1985, p. 294). In other words, individuals have limitations, both cognitively and attentionally. When assessing a situation they select aspects of the problem to consider and they do this on the basis of their judgement of what is most important. They then work with these elements of the problem to come up with a satisfactory plan by settling for an outcome that they can live with rather than striving for the absolute "rational" best result (Ntalianis & Wise, 2011).

Similarly, prospect theory (Kahneman & Tversky, 1979) maintains that individuals value gains and losses differently and, as such, will base decisions on perceived gains rather than perceived losses. Thus, if a person were given two equal choices, one expressed in terms of possible gains and the other in possible losses, individuals would choose the former. Dual component theory of development (Horn, 1982) supports this contention. It suggests that development is always constituted by gains and losses. Baltes, Lindenberger and Staudinger (1998) stated that:

“Intellectual abilities that are thought to reflect the neurobiologically based mechanics of intelligence— like working memory and fluid intelligence—typically showed normative (universal) declines in functioning beginning in middle adulthood. Conversely, intellectual abilities that primarily reflect the culture-based pragmatics of intelligence—such as professional knowledge, language competence, and wisdom— may show stability or even increase into late adulthood. As to the ontogenesis of intelligence, then, gains and losses do co-exist” (p. 1056).

A further theory that contributes to our understanding of this phenomenon is the theory of planned behaviour (TPB). TPB proposes that subjective norms, attitude towards the behaviour, and control beliefs influence intentions to perform a given behaviour and those intentions directly influence the likelihood of performing that behaviour (Ajzen, 2002). However, the explanations thus far have faced criticism, as instruments designed to measure most of these concepts lack sensitivity tending to use dichotomous measures only and thus may be prone to bias as individuals choose desirable behaviours (Muratore & Earl, 2010). A number of other psychosocial theories really need to be considered in any attempt to fully understand retirement planning

intentions. The following is a short summary of how some of these theories add to our understanding of the planning process.

Expectancy theory (Vroom, 1964) proposes that three perceptions (valence, instrumentality, and expectancy) can separately influence an individual's motivation, but when combined, these perceptions can have a powerful effect. When deciding among behavioural options, individuals select the option with the greatest motivational forces. In summary: $\text{Motivation Forces} = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$. Therefore, if as Vroom (1964) proposes, individuals select options with the greatest motivational forces by maximising the $\text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$ their choice of retirement preparation goals will be deliberate. Individual differences in motivational orientation will lead to differences in the strategies employed to maximise their impact on the expected outcomes of these goals.

Cognitive dissonance theory (Festinger, 1957) suggested that the existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance. Individuals will strive to make choices and implement plans to reduce any feelings of dissonance between what they perceive as negative aspects of retirement and their desired outcomes for the future.

The theory of selection, optimisation and compensation (SOC, Baltes & Carstensen, 1996) proposes that throughout the entire lifespan individuals encounter certain opportunity structures as well as limitations in resources that can be mastered adaptively by an orchestration of three components: selection, optimisation and compensation. This suggests that the retirement planning behaviours and strategies to implement them may be selected to achieve optimum outcomes and avoid negative ones. Life span development theory (Baltes, 1997) suggested that the concepts proposed by SOC are not limited to a specific stage in the lifespan, rather development extends across the entire life

course and, from conception onward, lifelong adaptive processes of acquisition, maintenance, transformation, and attrition in psychological structures and functions are involved in behavioural choices and strategies.

A good example of selectivity is suggested by socioemotional selectivity theory (Carstensen, 1995), which states that social contact is motivated by a variety of goals ranging from basic survival (such as protection from physical danger) to psychological goals (such as development of self-concept and regulation of emotion). The theory holds that similar sets of social goals operate throughout life but that the salience of specific goals fluctuates depending on their place in the life cycle. Carstensen (1995) states that “in particular the regulation of emotion becomes increasingly salient over the life course while the acquisition of information and the desire to affiliate with unfamiliar people decreases” (1995, p. 152).

The research reviewed thus far suggests retirement planning can promote better adjustment to retirement and greater retirement satisfaction. Planning behaviours are thought to be rational choices made within cognitive limitations, depending on whether individuals perceive gains or losses as more important. These perceptions may be influenced by subjective norms, attitudes and control beliefs. Individuals select options with the greatest motivational forces and strive to reduce dissonance and achieve greater parity with their desired outcomes. This is part of a pattern as they try to achieve optimum outcomes and avoid negative ones throughout their lifespan. These decisions and planning behaviours will vary by the individual. Research that explains why individuals choose different paths has focused mainly on extrinsic factors and how these factors impact on the propensity to engage in planning behaviours. However, this does not explain the intrinsic influences of planning behaviours, which this research contends, offers a deeper understanding of not only the propensity to plan but also individual differences in strategic inclinations. These strategic

predispositions offer richer explanations of the factors that affect retirement preparation outcomes, such as anxiety and affect.

Construal level theory (CLT, Liberman and Trope, 1998; 2003) offers some insight into these individual differences in strategic inclinations. It suggests that temporal distance from future events influences representations and judgement. The further removed an object is from direct experience, the higher (more abstract) the level of construal of that object. As retirement is a future event for all except those who have already retired, CLT implies that the timing of individuals' retirement will have implications regarding how they construe the retirement event, which will, in turn, influence any planning behaviours they might engage in. CLT proposes that as psychological distance increases, individual's mental construals, become more abstract. As a future event, retirement will vary in temporal distance, which is an aspect of psychological distance. Individual's retirement preparation strategies, that are implemented to achieve their goals, will vary in levels of abstraction depending on temporal distance. Construing retirement goals at a concrete low level of identity compared to a high level leads to different means of goal pursuit. These differences will, in turn, influence the impact that pursuing strategies in distinctive ways will have on retirement outcomes. While CLT has been applied to research in retirement, its focus has been on how different levels of abstraction predict decisions, such as whether or not to save for retirement for example (Lynch & Zauberman, 2006). The relationship between CLT and how individuals implement goals has not received any attention in retirement research. While it is not the main focus, this research will explore the potential that CLT has to explain how levels of abstraction may also offer a deeper understanding of the relationship between individual orientations, means of goal pursuit and retirement preparation outcomes.

Research into self-regulation also offers insight into individual differences in strategic inclinations. Self-regulatory systems have either a desired or an undesired end-state. The system functions to move an individual's state closer to the desired end state or further from the undesired end state (Crowe & Higgins, 1997). Carver and Schier (1981, 1990) described these self-regulatory systems as discrepancy reducing (approach system), and discrepancy amplifying (avoidance system). Regulatory focus theory was discussed earlier in relation to retirement decisions. However, regulatory focus also has implications for how individuals pursue goals. Higgins, Roney, Crowe and Hymes (1994) proposed two alternative means or strategies for achieving discrepancy reduction, approaching actual self-states that match the desired end state or avoid actual self-states that mismatch the desired end state.

Higgins (1997, 1998) asserts that individuals are chronically promotion or prevention focused as a result of a subjective history of achieving successes or avoiding failures. His "Self-discrepancy theory" (1987) distinguishes between two types of desired end states. Ideal self-guides, which are concerned with one's hopes wishes and aspirations, and ought self-guides which are concerned with one's beliefs about their duties, obligations and responsibilities. Higgins et al. (1994) suggest that ideal and ought self-regulation differ in their strategic inclination. Ideal self-regulation focuses on the presence and absence of positive outcomes whereas ought self-regulation focuses on the presence and absence of negative outcomes. The concern of ideal self-regulation with positive outcomes (their presence or absence) should engender an inclination to approach matches to hopes and aspirations as a strategy for ideal self-regulation. The concern of ought self-regulation on the other hand is with negative outcomes (their presence or absence) and should engender an inclination to avoid mismatches to duties and obligations as a strategy for ought self-regulation (Crowe & Higgins, 1997). In general then, ideal and ought self-regulation can be considered as

involving two types of regulatory focus (Higgins, 1996a). Ideal self-regulation has a promotion focus whereas ought self-regulation has a prevention focus. Individual's self-regulatory states will be different when their focus is promotion versus prevention. With a promotion focus the state is one of eagerness to attain advancement and gains whereas with prevention focus the state is one of vigilance to assure safety and non-losses (Crowe & Higgins, 1997).

Chronically promotion-oriented individuals tend to pursue promotion-focused goals and chronically prevention-oriented individuals tend to pursue prevention-focused goals (Higgins et al., 2001). As suggested earlier, while understanding why individuals make certain decisions with regards to their retirement preparation is very helpful, it does not address fully what possible impact the interaction between individual motivational orientations and these antecedents could have on retirement satisfaction and wellbeing. This can be addressed by examining retirement planning behaviours from a regulatory focus perspective. It is the contention of this research that individual's chronic regulatory focus influences their means of retirement preparation goal pursuit by eagerness approach or vigilant avoidance means. This will give a deeper understanding of "how" individuals can maximise their retirement satisfaction and well being beyond just knowing what factors influences it.

Implications of goal setting and strategic approaches to retirement preparation are discussed following an overview of the evidence in the current literature regarding the contentions made in this section.

2.2.4 Evidence for Retirement Planning Behaviours

Support for rational choice theory, bounded rationality and dual component of intelligence may be found in research into planning for financial security in retirement. This research shows that financial literacy plays a key

role in financial preparation for retirement (Hershey, Mowen and Jacobs-Lawson, 2003). A basic knowledge of the principles of savings has a direct effect on financial preparation (Lusardi & Mitchell, 2007 in Adams & Rau, 2001). For instance, research demonstrates that individuals choose to work in bridge employment in a different firm on the basis of their concerns about changes in their retirement benefits (von Bonsdorff, Shultz, Leskinen & Tansky, 2009). Also, individuals make choices regarding continuing work after retirement based on their experience of their current work. Griffin and Heskett (2008) found those who reported being tired of work were less likely to engage in bridge employment, whereas those who felt overloaded at work were more likely to. These examples suggest that choices are bounded by information to hand and also on a level of knowledge acquired over a lifetime.

There is some research that contends that planning is not necessarily a predictor of life satisfaction when the influence of perceived personal control is accounted for. Prenda and Lachman (2001) tested the mediating effect of perceived control on the relationship between planning and life satisfaction and their results revealed that perceived control fully mediated the relationship, with planning no longer a significant predictor of life satisfaction, once it was entered into the equation. However, other research shows that retirement planning significantly predicts engagement in bridge employment and increased retirement satisfaction. Topa et al. (2009) quotes Taylor and Doverspike (2003) who suggest that planning eases the transition into retirement through the dual process of allowing a person to develop realistic expectations about retirement and facilitating goal setting. As the theory of planned behaviour (TPB) suggests control beliefs influence intentions to perform a given behaviour and those intentions directly influence the likelihood of performing that behaviour (Ajzen, 2002).

When comparing the retirement savings of baby boomers (those born between 1946 and 1961) and other age cohorts, DeVaney and Chiremba (2005) found support for the theory of planned behaviour. Retirement savings of the baby boomer cohort was shown to be influenced by attitude, subjective norms, perceived control, and past experience. “Increased tolerance for risk when saving or investing, reporting being a saver, being married, more education, being a homeowner, and reporting spending less than income, were significantly related to both dependent variables, holding a retirement account and the amount saved for retirement” (DeVaney & Chiremba, 2005, p. 6). Other research into retirement savings reveals respondent’s self-reported attitudes, subjective norms and perceptions of behavioural control, appear to account for a high proportion of the variance in behavioural intention (Croy, Gerrans and Speelman, 2010). Croy et al., (2010) found, contrary to expectations, that respondent’s risk tolerance adds little to the prediction of behavioural intention. By contrast, perceptions of planning importance and self-assessed planning preparedness (domain knowledge) are found to exert powerful indirect influences on behavioural intentions via the perceived behavioural control construct.

Yang and DeVaney (2011), applying the TPB framework, found that intrinsic rewards of work were negatively related to retirement planning. In other words those individuals that experienced satisfaction from their work were less likely to plan for retirement but may seek retirement nonetheless. They observed this to be the case for those who had defined contribution pensions or both defined contribution and defined benefit plans. They suggest that those with just defined benefit plans, whether they enjoy their work or not, do not engage in retirement planning behaviours. Employees with defined benefit plans may have a predetermined date for retirement and in order to maximise their return from the defined benefit plan, they may choose to stay in employment regardless of whether they enjoy their work or not.

Griffin et al. (2012) tested the effects of four predictors of behaviour suggested by the TPB (attitude, subjective norms, behaviour norms, and perceived behavioural control) on the retirement planning behaviours of late-career workers. Albeit uncovering some interesting gender differences, all predictors were found to have a significant positive effect on retirement planning.

The retirement planning behaviour research is not without criticism and a core weakness is the questionable validity of many of the retirement planning behaviour measurement instruments. Petkoska and Earl (2009) for example developed a broadly themed retirement planning questionnaire (RPQ) to address what they saw as a shortcoming in the availability of retirement planning measurement instruments beyond financial planning. Their 36-item questionnaire divided the planning domain into four factors, financial/general; health; interpersonal/leisure and work. Planning in each domain was influenced by a unique set of variables. “Goals emerged as a consistent and positive predictor of planning. Gender accounted for health and interpersonal/leisure planning, while work-planning behaviour was negatively predicted by income. Time perspective also helped to clarify the amount of retirement planning undertaken in the financial and interpersonal/leisure domains” (2009, p. 245). They suggested that when attempting to create and deliver interventions designed to increase financial/general, health, interpersonal/leisure, and work planning for retirement, a broad-brush, one-size-fits-all approach, is not appropriate.

Muratore and Earl (2010) suggested that although the RPQ measured a range of planning activities, the yes/no dichotomous scale used lacks sensitivity and the measure focuses on knowledge seeking. They attempted to address this shortcoming by developing the RPQ2. Their scale samples a broader number of behaviours according to the reflexive planning domains outlined above and uses

a continuous scale. Results of two studies carried out by Muratore and Earl (2009) demonstrated that overall, participants reported spending very little effort investigating public-protection behaviours (pensions, public health programmes etc.). Amongst self-insurance behaviours (savings, investments etc.), effort was least invested in positioning oneself for a post-retirement job for financial reasons and amongst self-protection behaviours (healthy lifestyle choices, engagement in social support networks etc.), effort was least invested in positioning oneself for a post-retirement job for non-financial reasons and attending leisure planning seminars. For a summary of the theories and examples of the evidence for them in the retirement literature to date see table 2.1. Some of the independent variables and dependent variables included in previous studies are also listed.

In both the RPQ and the RPQ2, goals emerged as a consistent positive predictor of retirement planning. However, in the RPQ the measurement was concerned with the presence or absence of planning behaviours. While the RPQ2 did introduce a measurement of effort expended in pursuing the planning behaviours, neither of these measurements examined “how” these planning behaviours were implemented.

It is the contention of this research that individual’s chronic regulatory focus influences their means of retirement preparation goal pursuit by eagerness approach or vigilant avoidance means. This will give a deeper understanding of “how” individuals can maximise their retirement satisfaction and wellbeing beyond just knowing what factors influence it. Regulatory focus theory is further examined in chapter four. Examining the impact of approach or avoidance strategies in relation to retirement planning behaviours requires an initial review of the current measurements of retirement adjustment and satisfaction. The final section of this chapter outlines the current approaches to measurements of outcomes in the retirement literature.

Table 2-1 Summary of Theories and Examples of Supporting Literature for Retirement Decisions (Shaded Grey) and Retirement Planning (Shaded Blue)

Theory	Details	Theory Applied To		Independent Variable	Dependent Variable.
		Retirement Decisions	Retirement Planning		
Activity Theory Havighurst, R.J. 1961	Social and leisure activities and role replacement promote wellbeing in older adults. Higher levels of participation occur when pre-retirement roles must be relinquished	Noone, O;Loughlin & Kendig, 2013		Demographics, retirement confidence, living standards and retirement activity.	Life satisfaction
Big Five. McCrea & Costa. 1999	Relatively enduring patterns of thoughts feelings and actions characterise individuals, Traits can be quantitatively assessed that they show some degree of cross situational consistency	Montizaan, Grip & Fourage, 2014		Big five personality traits, training polices, job tasks	Retirement expectations
Bounded rationality. Simon, 1985	Behaviour is adaptive within the constraints imposed both by the external situation and by the capacities of the decision maker		Ntalianis & Wise, 2011	Gender, age, qualification, group membership	Dollar balance in superannuation account, education resources
Career stage Theory. Super, 1980; Levinson, 1978; Dalton and Thompson, 1986.	Distinct periods of psychological and behavioural exploration, adaptation, and stabilization following pivotal work and non-work-related events, age-related transitions, or professional development stages	Post, Schneer, Reitman & dt Ogilvie, 2013		Gender, Work centrality, retirement attitude, health, career stage, income, job satisfaction, discrimination	Expected Retirement age
Cognitive Dissonance Theory. Festinger, L. 1957	The existence of dissonance, being psychologically uncomfortable, motivates the person to reduce the dissonance and achieve consonance.	Solem, 2012		Managers public or private sectors	Opinions, preferences, behaviour potential
Continuity Theory Atchley, R.C. 1989	Older individuals attempt to preserve consistent life pattern before and after retirement in order to mitigate unwelcome disruption	Job Satisfaction, negative attitudes towards retirement predictors (Gobeski & Beehr, 2009) Topa et al, 2009 Lim & Feldman, 2003	Topa et al, 2009	Health, negative work conditions, job satisfaction, work involvement, positive attitudes; Time usage patterns	mental/physical illness, bridge employment, life satisfaction, retirement satisfaction; Retirement anxiety, intended retirement age, expected satisfaction in retirement and bridge employment

Disengagement Theory Havighurst, R.J. 1961	Growing old involves a gradual and inevitable withdrawal or disengagement resulting in decreased interaction between an aging person and others in the social systems.	Gee & Baille, 1999		Transition to rest, new beginning, continuity, imposed disruption	Job involvement, work involvement, current leisure experience, age, gender, marital status, occupation etc.
Dual Component Theory of Intelligence. Horn. 1982	Development is constituted by gains and losses. Intellectual abilities that are thought to reflect the neurobiologically based mechanics of intelligence. Working memory and fluid intelligence typically show normative (universal) declines in functioning beginning in middle adulthood.	Baltes, B. B., Rudolph, C. W., & Bal, A. C. (2012)		N/A	N/A
Expectancy Theory. Vroom, V. H. 1964	Three perceptions (valence, instrumentality, and expectancy) separately influence an individual's motivation. When combined, they have a powerful effect. When deciding among behavioural options, individuals select the option with the greatest motivational forces. Motivation Forces = Expectancy X Instrumentality X Valence	Jacobson & Eran, 2011		Expectancy components	Retirement choice
Future Time Perspective Lewin, K 1942	The degree to which and the way in which the future is anticipated and integrated in the psychological present of an individual.		Hershey, Henkens & Van Dalen, 2007	Age, gender, household income and years of education.	Future time perspective, retirement goal clarity, perceived financial knowledge, retirement planning activity level, perceived savings adequacy
Life Course Theory. Elder & Johnson, 2003; Quick & Moen, 1998	Contextual and psychological factors need to be considered in order to understand the consequences of life transitions	van Solinge & Henkens, 2008; Quick & Moen, 1998	Donaldson, Earl & Muratore. 2010; Quick & Moen, 1998	Demographics, Physical and psychological health, pre-retirement planning & post retirement planning, mastery and conditions of exit; Gender, resources, transition characteristics, psychological factors/retirement anxiety; Health, retirement timing, pre-retirement planning	Retirement Adjustment; Adjustment to and satisfaction with retirement; Retirement satisfaction, retirement quality,
Life Span development Theory. Baltes. 1997	Development is not completed at adulthood but extends across the entire life course. Lifelong adaptive processes of acquisition, maintenance, transformation, and attrition in psychological structures and functions are involved.	Floyd, Haynes, Doll et al, 1992		Gender, Socioeconomic status, length of retirement, part time employment	pre-retirement work functioning, adjustment and change, reason for retirement, satisfaction with life, current sources of enjoyment, and leisure and physical activities

Prospect theory. Kahneman, D. & Tversky, A. 1979	Individuals value gains and losses differently. Decisions are based on perceived gains rather than perceived losses. Given two equal choices, one expressed in terms gains and the other in e losses, individuals would choose gains.		Moen, Sweet & Swisher, 2005	Gender, relational contexts, biographical pacing, health and personal mastery	Retirement planning
Protean Career Attitude. Hall & Moss. 1998	Self-directedness is the ability to be adaptive in terms of performance and learning demands. Individuals with a self-directed career attitude experience greater responsibility for their career choices and opportunities and are more actively engaged with their career development.	Voes & Segers, 2013		Self-directed career attitude, Career self-management behaviours, Engagement	Retirement intention
Rational choice theory. Coleman 1986 & 1990	Patterns of behaviour in societies reflect the choices made to maximize their benefits and minimize their costs. Individuals make decisions by comparing the costs and benefits of different courses of action.		Davis, 2007	Worker or retiree, financial planning, social support, income and number of goals	Retirement satisfaction, life satisfaction, financial satisfaction
Regulatory Focus Theory, Higgins, 1994, 1997	Individuals with approach motivation exhibit high vigilance for positive stimuli and strong behavioural tendencies to pursue positive stimuli. Avoidance motivation is a general sensitivity to negative stimuli in the environment and a strong behavioural tendency to avoid aversive stimuli	Kanfer, Nguyen, & Korff, 2010		Sector, job type, health, finances, work motivation states, work centrality, motivational traits etc.	Retirement planning related measures
Resource Perspective. Hobfall, 2002	The Physical, cognitive, motivational, financial, social and emotional resources make up the total capacity an individual has to fulfil their needs.		Earl & Archibald, 2014	Demographics, work centrality, Mastery, goal setting, goal adjustment, goal pursuit, goal achievement	Confidence in preparation, timing of retirement, participation in bridge employment;

Role Theory. Biddle. 1986	Individuals have several roles in their lives. Each role is a set of behaviours defined by the expectations that other people related to that role have for them.	Adams, 1999.	<p>Wong & Earl, 2009</p> <p>General Retirement Goal Clarity predicts financial planning (Hershey et al, 2007)</p> <p>Negative view of retirement predicts bridge employment (Lo & Chan, 2014)</p>	Demographics, ret. Income satisfaction, health satisfaction, attitude toward ret., job satisfaction, career commitment, career growth opportunity, occupational goal attainment; Demographics, psychological health.	Planned retirement age; Retirement Adjustment
Selection, Optimization and Compensation. Baltes & Carstensen. 1996	Across a lifespan one encounters opportunity structures as well as limitations in resources that can be mastered adaptively by an orchestration of three components: selection, optimization and compensation	Muller, Lange, Weigl, Oxfart, & der Heijden, 2013		Age, gender, health status,	Selection, loss based selection, optimization, compensation
Social cognitive Career Theory. Lent et al 1994	The means by which individuals exercise personal agency in the career development process, as well as extra-personal factors that enhance or constrain agency include self-efficacy, expected outcomes and goal mechanisms.	Wohrmann, Deller & Wang, 2014		Social approval etc.	Post retirement career intention
Social Identity Theory, Tajfel, 1979	Individuals sense of who they are is based on their group membership	Desmette & Gaillard, 2008		Demographics, Perceived health and wealth, job characteristics, intergroup variables, cognitive identity, affective identification	Early retirement, bridge employment, devaluing work domain, career development, etc.
Social Normative Theory,	Individuals conform to normative social influences	Hershenson, 2014, Review article		N/A	N/A
Socioemotional Selectivity theory. Carstensen. 1995	Social contact is motivated by a variety of goals ranging from basic survival to psychological goals. Similar sets of social goals operate throughout life but the salience of specific goals fluctuate depending on place in the life cycle. The regulation of emotion becomes increasingly salient over the life course while the acquisition of information and the desire to affiliate with unfamiliar people decreases.		Griffin, Hesketh & Loh	Gender, age, income, education, marital status, health, job satisfaction	Intended retirement age, retirement preparation, subjective life experience

2.3 Retirement Adjustment and Satisfaction

A review of retirement adjustment by Wang et al. (2011) suggests that while a lot of research has been conducted in recent decades to identify factors that influence retirement adjustment quality, the theoretical basis of most of those studies remains rather implicit, with few hypotheses explicitly formulated. Wang & Shultz (2010) suggest that “although studies have theorised antecedents at multiple levels (e.g., individual, job, organisational, and societal), the informed decision-making approach that most studies follow is not capable of explicating how variables from multiple levels interact in influencing retirement/bridge employment decisions” (2010, p.195).

This concern was echoed by Wong and Earl (2009) who suggested that while there are other demographics, such as age, gender, and length of time retired that are reported as important to retirement adjustment, recent research suggests that a more holistic view needs to be taken. Organisational context and psychosocial influences of retirement adjustment also need to be considered. The following is a short review of the current state of research into these factors. This is followed by an examination of the theoretical contributions that are offered to help explain how these factors predict retirement adjustment and satisfaction. This section will conclude with a critique of the current approaches to measuring retirement outcomes for individuals that have yet to retire. It will outline the approach taken by this research to overcome these shortcomings.

Research on personal attributes has demonstrated that individuals who report good health and relatively higher income, tend to report more positive adjustment and life satisfaction (Quinn, Burkhauser, & Myers, 1990; Taylor & Shore, 1995; Wong & Earl, 2009). It is not just positive physical health that is associated with successful retirement adjustment; positive mental health is also

a predictor of positive retirement adjustment (Kim & Moen, 2002; Wang, 2007). Other research shows that a decline in physical health is negatively correlated with retirement adjustment (Kim & Moen, 2002; van Solinge & Henkens, 2008; Wang, 2007). Also poor health may impair work performance and may be a consequence of work demands, individuals who self-report health problems expect to retire earlier (Dwyer & Mitchell, 1999). Individuals who perceive themselves to be healthy expect to retire later than those who perceive themselves to be in poor health. Opportunities for better fit between health and job demands can become a consideration in transitioning to bridge employment prior to a complete exit from the workforce.

Postretirement activities show that engaging in bridge employment or volunteer work has a positive effect on retirement adjustment (Dorfman & Douglas, 2005; Kim & Feldman, 2000; Wang, 2007; Zhan, Wang, Liu, & Shultz, 2009). Some form of postretirement work has also been shown to correlate with satisfaction during retirement (Barrow, 1996; Feldman & Kim, 2000; Kim & Feldman, 2000; Mor-Barak, 1995). Recent empirical research generally supports the prediction, that if older employees' basic preferences and needs remain much the same after retirement, individuals will seek out the same kind of jobs in retirement that they found fulfilling before retirement (Gobeski & Beehr, 2009; Wang et al., 2008) and also shows that the type of bridge employment retirees engage in has implications for postretirement physical and mental health (Zhan, et al., 2009).

Bridge employment is not necessarily the only type of post retirement work that individuals are likely to engage in. Making contributions to one's community through voluntary work is another option taken up by some retirees. However, individuals are less likely to engage in voluntary work during their retirement years if they have had no prior association with the volunteer

organisation, suggesting that preretirement planning for volunteer work plays a critical function (Atchley, 1993; Harlow & Cantor, 1996).

With regard to income, a positive financial status has been shown to predict positive retirement adjustment (e.g., Gall, Evans & Howard, 1997; Pinquart & Schindler, 2007; Quick & Moen, 1998). The relationship between retirement satisfaction and access to key resources including finances has been explored also. Positive relationships have been demonstrated in a number of studies (Kim & Moen, 2002; Reitzes & Mutran, 2004; van Solinge & Henkens, 2008 for example).

The literature reviewed thus far indicates that factors that influence adjustment to retirement includes the financial position experienced by individuals, their health status and employment activities. Commitment to leisure activities and engaging in bridge employment or volunteer work was also shown to have a positive effect on retirement adjustment. While these have been identified as important factors, the strategies adopted to achieve them have not received any attention. Research, that looks at the individual differences in strategic inclinations, that influences choices of goal pursuit strategies for these factors is lacking. This research programme will use the factors of health, finances, and activity, contributing to one's community and working in retirement to form the basis of an initial research study to elicit goal pursuit strategies. This study will seek to demonstrate that these strategies will be distinguishable according to different motivational strategic inclinations. This aim is developed in greater detail in the forthcoming chapters. The remainder of this section will review the additional factors that influence retirement adjustment and satisfaction.

Marital status has been shown to be highly correlated with successful retirement adjustment (e.g., Kim & Moen, 2001; Price & Joo, 2005; Pinquart & Schindler, 2007). Other research, suggests spouse-working status (working vs.

not) is negatively correlated with retirement adjustment (Wang, 2007) whereas marital quality is positively correlated with retirement adjustment (Davey, 2004; Szinovacz & Wang, 2007). Further, the number of dependent children and the loss of a partner during the transition to retirement have been shown to be negatively related to retirement adjustment (Kim & Feldman, 2000; van Solinge & Henkens, 2005, 2008).

Wong and Earl (2009) found that perceived preparedness for retirement, ease of the retirement decision, gradual entry into retirement, choice in the retirement decision, and say in the timing of retirement all correlated positively with retirement adjustment. These also loaded onto a single factor that they labelled "Conditions of Exit". Interestingly in their research, the psychosocial influence of work centrality did not predict better retirement adjustment. As the participants' average length of retirement was ten years in their study they suggest the influence of work centrality may have worn off. Other research that looked at work centrality in terms of expected retirement age found that it was associated with intentions to retire later (Post, Schneer, Reitman & Ogilvie, 2012; Schmidt & Lee, 2008).

Wang et al. (2011) in their review also found that voluntariness of the retirement, retirement planning, retiring to do other things and retiring to receive financial incentives (Quick & Moen, 1998; Reitzes & Mutran, 2004; van Solinge & Henkens, 2005, 2008; Wang, 2007) were all positively related to retirement adjustment. Conversely, retiring earlier than expected and retiring for health caring reasons (Quick & Moen, 1998; Wang, 2007) were negatively related to retirement adjustment.

Mastery has been defined as the degree to which one feels they have a general sense of control over what goes on in his or her life (McKean Skaff, Pearlin, & Mullan, 1996). A sense of mastery or personal control significantly predicted retirement adjustment (Donaldson et al., 2010; Ryff, 1989; Skinner,

1996). The pursuit of leisure activities is also shown to have a positive effect on retirement adjustment quality (Dorfman & Douglas, 2005). However, anxiety associated with social activities has a negative effect.

Wang et al. (2011) point out a weakness in the current literature on retirement adjustment suggesting that while it might be fruitful to systematically examine the impact of different retirement motivations on retirees' adjustment quality, few studies have done so. Despite the fact that motivation research has made significant theoretical progress in conceptualising the adjustment and coping process as a resource-based self-regulatory process (Wang et al., 2011), this progress has not been applied to advance our understanding about the retirement adjustment process. So in summary, there is a need to explore how individual motivational inclinations affect the experience of preparing for retirement. The next section will review the current research regarding the theoretical contributions to predicting retirement adjustment and satisfaction and will outline the approach taken in this research.

2.3.1 Predicting Retirement Adjustment/Satisfaction

Rational choice theory (Coleman, 1986, 1990) suggests that individuals try to predict the outcomes of future events that might result from actions taken in the present. It is also important to examine the accuracy of the prediction of feelings when looking at how "good" a decision was (Lowenstein & Schkade, 1999). An inaccurate prediction of those feelings can lead to several outcomes, one example being dissatisfaction. Decisions about retirement are, in the main, in the control of the individual and as such beliefs about retirement satisfaction or feelings associated with the consequences of retirement can preoccupy those decisions.

Continuity theory, and investment choice theory (Stephens & Feldman, 1997) helps to explain why many older workers choose to engage in bridge employment (or partial retirement) after they cease working full-time on long-held jobs but before leaving the workforce altogether (Beehr, 1986; Doeringer, 1990; Feldman, 1994; Ruhm, 1990). Engagement in bridge employment predicts positive retirement adjustment and satisfaction.

As many as one-third of retirees experience a decrease in life satisfaction after retirement (Atchley, 1976; Elwell & Maltbie-Crannell, 1981). Three domains have been identified as important when it comes to reducing stress associated with retirement decisions: the short term impact of the event, the current satisfaction with life in retirement, and the long term impact of the event (Floyd et al., 1992). Research on decision-making explains that when faced with goals that have a time-lag between the decision to retire and the enactment of the decision, a process of goal striving is engaged (Bagozzi, Dholakia, & Basuroy, 2003). During this process individual's predictions regarding feelings (e.g., satisfaction) and planning behaviour (e.g., saving or investing for retirement) take place. When examining possible outcomes to a decision, both positive and negative emotions are expected (Bagozzi et al., 2003). These anticipated feelings can influence the steps taken toward the goal (Davis, 2007). Past research has examined differences in current levels of life satisfaction in pre-retirees and retirees (e.g., Palmore, Fillenbaum, & George, 1984) and anticipated positive or negative feelings involved in retirement satisfaction (Davis, 2007).

As Wang et al. (2011) suggests, the retirement adjustment process has not been explored from the motivational, resource-based self-regulatory perspective. The current study looks at advancing our understanding of such motivational and self-regulatory processes by examining the impact of a "Fit" versus "Non-Fit" between individual's chronic regulatory focus and their

strategy choices on their retirement preparation experiences. The approach taken to measuring retirement outcomes is reviewed in the following paragraphs. A critique of these approaches is offered and the approach taken in this research is outlined.

Instruments that have been developed to measure anticipated retirement satisfaction and adjustment are explored in this section. Early measurements of general retirement satisfaction were designed to measure actual retirement satisfaction rather than anticipated satisfaction. The “Retirement Descriptive Index” (RDI) for example developed by Smith, Kendall and Hulin (1969) contained a number of subscales (e.g., Financial, Work and Activities subscale). Extensive support for the reliability and validity of the scales was reported by Smith et al. (1969) and since then (e.g., Gall, & Evans, 2000). Since its development the same instrument has been used to measure anticipated retirement satisfaction (e.g., Taylor-Carter, Cook & Weinberg, 1997). Methods to achieve a measure of anticipated retirement satisfaction included instructing participants to complete the measures as if they were already retired (Davis, 2007) and in some cases using the various subscales to create domain specific anticipated measurements such as anticipated financial satisfaction for example (Taylor-Carter et al, 1997).

The “Retirement Satisfaction Inventory” (RSI) was originally developed by Floyd et al. (1992) and was subsequently adapted for and used with European samples. The RSI contains three sets of items relating to (i) reasons for retirement, (ii) satisfaction with life in retirement, and (iii) sources of enjoyment. Its objective is to assess ‘both current retirement satisfaction and perceptions of retirement-related experience predictive of adjustment and well-being in later life (Fonseca, 2007). Recent research demonstrated reliability and validity of the RSI (Kupperbusch, Levenson, & Ebling, 2003; Price & Balaswamy, 2009; Leung & Earl, 2012).

In addition to assessing retirement satisfaction and adjustment, wellbeing in retirement has also attracted interest in the research literature. One perspective that has been used to investigate wellbeing in retirement is the resource perspective (Leung & Earl, 2012). Resources are the capacity that one uses to fulfil needs or goals (Hobfall, 2002). Retirement resources refer to the resources crucial to the retirement phase and consist of physical, financial, social, emotional, cognitive and motivational resources. Leung and Earl developed the “Retirement Resources Inventory” (RRI) to examine retirement resources. Their study provided strong empirical support for the resource perspective and their results loaded onto three factors. This differed from Wang and Shultz (2010) who proposed a six-factor model, but was in keeping with the three-factor model advocated by Hendricks and Hendricks (1986).

Based on the four modes of retirement experience reported by Hornstein and Wapner (1985) the “Retirement Expectations Inventory” (REI) was designed to examine expectations for retirement, their relationship with gender, current work attitudes, and current leisure experiences (Gee & Baillie, 1999). It was designed to assess individuals’ experience of retirement as a transition to old age/rest, a new beginning, continuity and imposed disruption.

An alternative perspective offered in the literature is the measurement of “Retirement Confidence” (Kim, Wong & Anderson, 2005). Data was used from the “Retirement Confidence Survey” (RCS), which has collected data since 1991 “to gauge the views and attitudes of working-age and retired Americans regarding retirement, their preparations for retirement, their confidence with regard to various aspects of retirement, and related issues.” (Kim et al., 2005, p. 78).

The difficulty with these approaches is that research on retirement adjustment and satisfaction explores the issue from an anticipated perspective rather than a current perspective. It asks individuals to predict how they will

feel into the future. A number of issues have been identified with the use of prospective measures such as these. Firstly, they are only suited to short and medium-term phenomena. Individuals change their interpretations of scales over time either due to self-norming or maturation. This can affect their anchor points on scales such that what they believed to be extreme (positive or negative) points may shift over time. Also, another concern is that the intrusion of actual feelings at the time of making predictions may affect their interpretations of the scales or individuals may save the effort of introspecting about their current feelings and just simply report their prior predictions (Loewenstein & Schkade, 1997). As noted above, other researchers have used retrospective approaches and asked individuals to predict how they will feel based on prior experiences of similar phenomena (Taylor-Carter et al., 1997; Davis, 2007). The key problem with this design is that individual's memories of how they expected to feel are likely to be distorted powerfully by how they actually feel (the "hindsight bias"), most likely in a bias-attenuating fashion (Roese & Vohs, 2012). "That is, they are likely to remember erroneously that they expected to feel as they actually feel" (Loewenstein & Schkade, 1997, p. 5).

This research programme addresses this issue by utilising an instrument designed to capture current feelings of anxiety regarding impending retirement. This instrument is called the social components of retirement anxiety scale (SCRAS). This is used in conjunction with the Positive Affect Negative Affect PANA Schedule to explore how individuals feel in the present about their impending retirement. In the study of human emotion, the primary empirical method is the straightforward self-report questionnaire, on which individuals rate their current feelings, moods and emotional states. Many well-validated self-report instruments have been developed, such as the Multiple Affect Adjective Checklist (Zuckerman and Lubin, 1965) and the (PANA) Schedule (Watson, Clarke & Tellegen, 1988). Self-reported emotions have been found to

predict many important behaviours, including prosocial acts, aggression and suicide (e.g., Carlson, Charlin & Miller, 1988; Lindsay and Anderson, 2000; Nierenberg, Gray & Grandin, 2001; Sanchez and Le, 2001 in Wilson, 2003). By examining current feelings as against predictive measures the theoretical and conceptual issues of relying on individuals to think into the future about what they might feel about their retirement is removed. This allows for a deeper understanding of what impact behaviours associated with retirement planning has on individuals as they progress through the retirement process in preparation for eventual retirement.

2.4 Conclusion

The changing landscape of retirement in the 21st century was described in this chapter. With these changes a review of the retirement literature shows the evolution of thinking with regards to retirement. There is clearly a move away from simple examinations of the decision to retire to a more thorough examination of the complex conceptualisation of retirement as a process involving the retirement decision and retirement planning behaviours. A review of the psychosocial theories underpinning this conceptualisation was presented and evidence from the extensive body of retirement literature was outlined. It was clear from this review that the factors underlying why individuals make certain decisions with regards to their retirement preparation has been addressed. Research into the type of strategies employed during the planning phase has focused on creating new instruments to measure behaviours in different domains (Muratore & Earl, 2010 for example). The processes underlying individuals choice of behaviours is only partially explained by construal level theory (CLT, Trope & Liberman, 2010). For example (CLT)

explains how individuals predict the near future based on relatively abstract information for the distant future.

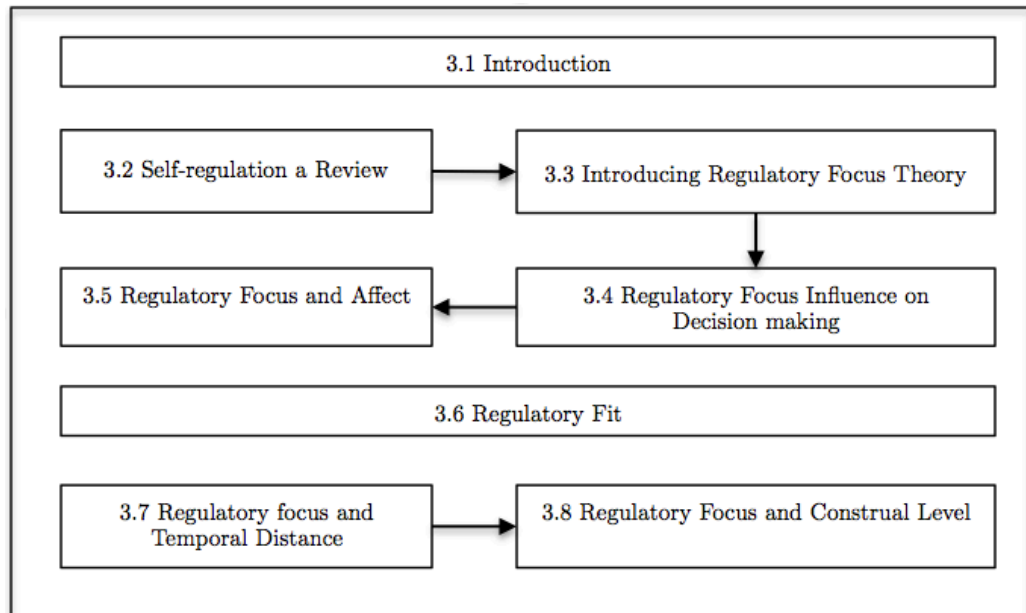
However, it was not clear what possible impact the interaction between individual motivational orientations and the means of pursuing the antecedents of retirement planning could have on retirement satisfaction and wellbeing. Regulatory focus theory is proposed as a theoretical viewpoint, which would help to explain the processes of retirement preparation goal pursuit, by eagerness approach or vigilant avoidance means. This will give a deeper understanding of “how” individuals can maximise their retirement satisfaction and wellbeing beyond just knowing what factors influences it.

RFT of self-regulation proposes the existence of distinct regulatory systems that are concerned with meeting either nurturance or security needs. Higgins (1997) suggests that nurturance-related regulation involves a promotion focus, whereas security related regulation involves a prevention focus. Higgin’s (2000) theory of regulatory fit proposes that motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one’s orientation lends a subjective sense of importance to the activity. The fit in other words is the relationship between a person's orientation to an activity and the means used to pursue that activity.

The review of the literature reported here has not managed to identify any retirement planning strategies that have been developed and classified as eager approach or vigilant avoidance type. The following chapters will review the literature regarding self-regulation. This review will inform the development of the research questions and hypotheses for this research in an attempt to address this apparent gap in the current literature.

Chapter 3 Self-Regulation

Figure 3.1 Layout of Chapter 3



3.1 Introduction

“Self-regulation refers to the processes, internal and/or transactional, that enable an individual to guide his/her goal directed activities over time and across changing circumstances” (Karoly, 1993, pp.25). Self-regulation theories have become a dominant perspective for understanding motivation, particularly in applied areas of psychology (e.g., Bandura, 1997; Carver & Scheier, 1998; Cropanzano, James, & Citera, 1993; Ford, 1992; Frese & Zapf, 1994; Fried & Slowik, 2004; Karniol & Ross, 1996; Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002; Lord & Levy, 1994; Steel & König, 2006; Vancouver, 2000). These theories include conceptualisations of the individual pursuing goals and making choices regarding the allocation of resources across these goals (Vancouver, Weinhardt & Schmidt, 2010). This research thesis

focuses on the how individuals' motivational approaches differ in terms of approaching goals. In particular, it will examine what impact these individual differences have on goal pursuit as they pursue goals to prepare for retirement. Research, on various aspects of self-regulation and factors that influence goal setting and goal pursuit, is reviewed in the following sections. Self-regulation related to retirement is explored and the concept of regulatory focus as one concept of individual difference in regulatory motivation is examined. The implications of regulatory focus and the notion of "Fit" versus "Non-Fit" between individual's chronic regulatory focus and their choice of goals and their chosen strategies to achieve these goals, are the subject of section 3.6. These implications, in conjunction with the research reviewed above, are then used to formulate the hypotheses for this research thesis and these are detailed in Chapter 4.

3.2 Self-Regulation a Review

Self-regulation refers to the processes that enable an individual to guide his/her goal directed activities over time and across changing circumstances and suggests that deliberate or automated use of specific mechanisms and meta-skills to modulate thought, affect, behaviour and attention are key processes of self-regulation (Karloy 1993). These processes are initiated to overcome failures of habitual actions or when routine activity is interrupted and goal setting or pursuit is required to move on.

While other definitions of self-regulation have been offered (e.g., Carver and Scheier, 1981; 1982; Forgas and Vargas 1999; Aspinwall, 2004; De Ridder & de Wit, 2006) there is significant variation among these with regard to the various self-regulatory principles they espouse and the specific processes they

propose, they all share two basic properties. Firstly, self-regulation is conceived of as a dynamic motivational system of setting goals, devising and enacting strategies to achieve these goals, evaluating progress, and revising goals and strategies accordingly. Secondly, emotional responses are seen as crucial elements of this motivational system, and are thought to be intricately linked with cognitive processes (Cameron & Leventhal, 2003; De Ridder & de Wit, 2006). Self-regulation research has been underpinned by a number of cognitive theories, which are reviewed in the following paragraphs.

Action theory is a cognitive theory in the German tradition where psychological research traditionally emanates from field studies in the workplace. As a behavioural cognitive theory, it states that action is defined as goal-orientated behaviour that is organised in specific ways by goals, plans, feedback and information assimilation (Frese & Zapf 1994 Frese, 2007, 2009). Action theory is organised around three core building blocks; understanding how individuals regulate their behaviours depends on the sequence of the actions (from perception of a goal to execution of the goal to feedback on the goal etc.); the hierarchical structure of the goal (consciously regulated or routinised); and the focus of the action (task context, social or self). Frese and Zapf (1994) suggest that Action Theory provides a framework from which to differentiate the ways in which individuals form and structure their goals. It suggests the important parameters of goals are: goal difficulty; specificity of the goal; connectedness of goals and sub-goals; hierarchy of goals and sub goals; temporal nature of goals; valence; process versus end state goals; and efficiency divergence of goals. Griffin and Hesketh (2008) used action theory to explore the predictors of post-retirement work. They found gender, health and retirement satisfaction were related to volunteer work while level of education predicted participation in paid post retirement work. For a comparison of action theory with the other theories underpinning self-regulation see Table 3.1. This

table also contains examples of research in the retirement literature that utilises the theoretical approach and whether it was used to examine retirement decisions, retirement planning behaviours or both.

The “Social Cognitive Theory of Self-Regulation” accounts for social influences on self-regulation. Humans have a large capacity for forethought, reflective self-appraisal, and self-reaction and this has given “prominence to cognitively based motivators in the exercise of personal agency” (Bandura, 1991, p282). Zimmerman (2000) expanded this concept and suggests that as well as the individual’s beliefs and goals, environmental cues influence goal-directed behaviour such that individuals are always adjusting their behaviour toward their goals. If you take the assumption that human behaviour is organised around the pursuit of goals (Austin & Vancouver, 1996; Bandura, 1997; Carver & Scheier, 1998; Elliott & Dweck, 1988; Emmons, 1986), which can be represented as current concerns (Klinger, 1975), personal projects (Little, 1983), personal strivings (Emmons, 1986), and life tasks (Cantor & Kihlstrom, 1987), that energise and direct activities. In doing so, goals energise and direct activities that gives structure and meaning to individual’s lives, such that understanding the person means understanding the person’s goals (Carver & Scheier, 1998). Indeed, having a clear vision of goals in one’s life, is in itself, a potent predictor of subjective well-being (Brandtstädter & Rothermund, 2002; Emmons, 1986). This process can occur at many levels, from moment-to-moment goals to goals that cover the entire lifespan. Furthermore, the levels of goals work hierarchically in concert with one another, both as standards for behaviour and as a means by which to organise information gained from the outside world. In turn the perception of both external events and internal states is shaped by the demands of currently relevant goals (Kelly 1955).

Taylor-Carter et al. (1997) explored retirement planning behaviours through the lens of social cognitive theory. They found that leisure and financial planning

along with participation in retirement seminars were positively related to retirement expectations and self-efficacy. See table 3.1 for a summary of the IVs and DVs for this study and the others reviewed in this section.

Individuals typically seek to pursue goals that are personally valued and attainable (Atkinson, 1964; Feather, 1982; Vroom, 1964). The study of self-regulation grew exponentially after the seminal work of Carver and Scheier (1981; 1982) on feedback loops, a key aspect of their control theory. Borrowing from cybernetics, Carver and Scheier described self-regulation in terms of a test-operate-test-exit process. Accordingly, individuals first establish a standard they want to meet, then test to see if they are already meeting the standard. If they are not, they engage in some unspecified action designed to meet the goal, and then if, upon learning with a subsequent retest that they have arrived at the goal state, they exit the regulatory loop (Vohs & Schmeichel, 2007). Ottingen, Pak & Schnetter (2001) suggests that any analysis of goal setting should not be restricted to exploring the determinants of goal types or goal commitment and should look at the processes of goal setting. “It is not the framing of goal content that [should be] focused on, but how individuals mentally elaborate the desired future” (2001. p. 750).

The Volition – Rubicon model of action phase clarifies how an individual progresses from motivational desires to sustained volitional behaviour by formulating and implementing the appropriate kinds of intentions and commitments. J. Heckhausen (2007) distinguishes between issues of motivation-why we strive for certain goals and issues of volition how to strive for certain goals. Volitional processes are defined as those thoughts and/or behaviours that are directed towards maintaining one’s intention to attain a specific goal in the face of both internal and external distractions (Corno & Kanfer, 1993; Snow, Corno & Jackson, 1996). As we have identified in the earlier chapter, the issue of how individuals pursue their retirement preparation goals has received little

attention. Motivational theories of self-regulation have the potential to offer a greater insight into how different approaches to goal pursuit does impact differentially on the outcomes experienced by individuals as they prepare for their impending retirement. These motivational theories are described hereunder.

Carver and Scheier (1998) proposed that goals differ from each other in a number of ways. Firstly, some goals aim to achieve a positive outcome, whereas other goals are focused on avoiding a negative outcome. This concept is similar to approach and avoidance motivational theory (e.g., Higgins, 1994; 1997). Higgins (1997) developed a concept we now know as “Regulatory Focus”, to explain the underlying principles of approach-avoidance motivation. This theory is dealt with in detail in the next section of this chapter. This approach is also reflective of the idea of standards described by Vohs & Schmeichel (2007). “Standards are the ideals, norms, obligations, or other guidelines that represent the end goal that individuals seek to meet when they engage in self-regulation” (2007, p10). Locke, Shaw, Saari, and Latham (1981) identified goal attributes in terms of intensity, difficulty, and specificity. Most research has focused on the difficulty and specificity of the standard being targeted (Kozlowski & Bell, 2006). Difficult and specific performance goals are beneficial for performance on straightforward tasks for which individuals possess the ability to perform effectively, and performance, therefore, is determined by their motivation to implement their ability (Locke & Latham, 2002; Seijts, Latham, Tasa, & Latham, 2004). Learning goals, on the other hand should focus individuals’ attention on discovering strategies and mastering a task rather than performing well (Locke & Latham, 2002; Seijts & Latham, 2005; Seijts et al., 2004).

Additionally, goals may differ in the way in which they are achieved. Typical self-regulatory problems of goal pursuit are, warding off distractions (Gollwitzer, 1990; Kuhl, 1984; Kuhl & Beckmann, 1994), flexibly stepping up

efforts in the face of difficulties (Wright & Brehm, 1989), compensating for failures and shortcomings (Bandura, 1991; Carver & Scheier, 1981; Wicklund & Gollwitzer, 1982), and negotiating conflicts between goals (Cantor & Fleeson, 1994; Emmons & King, 1988). Some goals are relatively constant or recurring in which behaviour changes to maintain the status quo whereas others are dynamic and evolving, with the goal being the process of traversing the changing trajectory of the activity (Carver, 2006). Self-regulation theories of goal striving focus on the question of how individuals overcome certain implementation problems (Gollwitzer & Brandstatter 1997). Gollwitzer (1993, 1996, 1999) proposed that there is a distinction between goal intentions and implementation intentions. The latter committing the individual to perform specified goal directed responses once a critical situation is encountered. In other words implementation intentions refer to the intention to perform a plan of action. These plans or strategies to achieve goals are the subject of the current research in so far as they form the basis upon which individual's self-regulatory processes are examined in preparation for retirement.

The research reviewed here thus far has identified different issues that impact on approaches to goal pursuit that range from goal attributes (intensity, difficulty and specificity) to problems of goal pursuit such as warding off distractions etc. Research has offered explanations of how individuals overcome these difficulties by processes such as goal striving, for example. This research is interested in how these goal pursuit strategies vary by individual differences such as strategic inclinations. Before addressing this issue, one concern highlighted by self-regulation research is the impact of affect on the process of goal striving.

Davis (2007) suggested that when faced with goals that have a time lag between the decision (e.g., the acknowledgement that at some point in time an individual wants to retire) and the enactment (e.g., retirement), a process of

goal striving is engaged (Bagozzi, et al., 2003). Within this process lies predicting feelings (e.g., satisfaction) and planning behaviour (e.g., saving or investing for retirement). When examining possible outcomes to a decision, both positive and negative emotions are expected (Bagozzi, et al., 2003). These feelings will influence the steps taken toward the goal and, therefore, any research that examines the relationship between individuals' intentions to retire and their strategies to achieve their anticipated outcomes should take account of their current feelings. Surprisingly there is very little research that examines current feelings in relation to retirement expectations. Most rely on measuring anticipated feelings, utilising prospective measurements. As a response the current research will attempt to address this shortfall by testing a model which includes chronic regulatory orientation as the independent variable and measuring current feelings of retirement anxiety, positive affect and negative affect as dependent variables.

Rooted in control theory (Carver & Scheier, 1998; Klein, 1989; Lord & Levy, 1994), theories of goal striving depict a dynamic process whereby effort, strategies, and so forth are determined by the changing discrepancy between current and desired states. These discrepancies may change over time due to changes in the desired states (i.e., goals), as well as changes in the current state (Vancouver, et al., 2010). Kanfer and Ackerman (2004) pointed out that theory and research on cognitive ageing was insufficient for understanding how ageing may affect self-regulation processes surrounding goal striving. It is the contention of the current research that it is not only cognitive changes due to ageing but situationally induced changes effected by proximity to the retirement event that influences the self-regulatory processes of individuals. Time depicted as temporal distance from intended retirement dates will moderate the type of strategies individuals choose and the level of retirement anxiety they will have. The types of strategies referred to above are also determined by individual's

chronic regulatory focus and the following section introduces regulatory focus theory and develops the concept of approach versus avoidance strategies. For a summary of the theories underpinning self-regulation and examples of empirical studies where these have been applied to retirement decisions and/retirement planning see Table 3-1 below. Examples of IVs and DVs measured in the studies are also listed.

Table 3-1 Summary of Theories underpinning Self-Regulation and examples of empirical evidence in relation to Retirement Decisions (shaded in fawn) and/or Retirement Planning (shaded in blue).

Theory	Description	Theory Applied To			
		Retirement Decisions	Retirement Planning	IV	DV
Action Theory, Frese (2007, 2009); Freses & Sabini (1985); Freses & Zapf (1994); Hacker (1998); Miller et al, (1960)	A cognitive theory tied to behavioural and objective work environments and outcomes. Focus on the regulatory function of cognitions on behaviour		Griffin & Hesketh, 2008	Gender, education, income, health, retirement age, tired of work	Post retirement work,
Construal Level. Trope & Liberman, 2003	Goals vary in their degree of abstraction. Higher and lower-order goals connected to each other in a hierarchical structure based on their level of abstraction		Lynch, Netemeyer, Spiller & Zammit, 2009	Propensity to plan	Spent money as planned, long run and short run
Control Theory. Carver & Scheier (1981, 1990, 2000a)	An outgrowth of the cybernetic model of engineering. Individuals possess representations of standards (viewed as goals) for their behaviour. These goals are part of a cognitive mechanism to regulate their behaviour.	Howlett, Kees, & Kemp, 2008		Financial knowledge, regulatory focus	Likelihood of contribution to pension, participation in retirement plan
Goal Adjustment Theory. Carver & Scheier, 1990; Wrosch, Schier, Miller et al, 2003.	Goal adjustment capacity based on individual differences. Associated with goal management: goal disengagement and reengagement.	Gagne, Wrosch & de Ponet, 2011		Disengagement and reengagement capacities	Retirement date, retirement expectations, goals
Goal Striving. Sheldon & Elliot (1999)	Wellbeing and adjustment is achieved through the successful pursuit of self-concordant personal goals. Draws from self-determination theory (Deci & Ryan, 2000)		Leung & Earl, 2012	Age, years working since retirement, years retired, dependents, resources types	Retirement adjustment and satisfaction

Process Theory of Planning. Friedman & Scholnick, 2014	Series of stages involved in developing goals. Once goals set behaviours enacted to fulfil goals. Decisions based on timing and perceived efficacy of preparatory behaviours. Plans implemented and revised if necessary.		Noone, Stephens & Alpass, 2010	Future Time Perspective, Locus of control, Time to Retirement, ELSI, Mental Health, Physical Health, HRS, Representations, Goals, Timing decisions.	Financial planning, lifestyle planning, Psychosocial planning, Health planning.
Regulatory Fit. Higgins (1997, 2001)	Motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one's orientation lends a subjective sense of importance to the activity		No empirical evidence found in relation to retirement decisions or retirement planning		
Regulatory Focus. Higgins (1994, 1997, 2006)	Pain vs. pleasure, or valence as motivational distinction. Classification of two positive or pleasurable situations vs. two negative or painful situations. Links also to approach and avoidance system in control theory.	Kanfer, Nguyen,& Korff, 2010		Sector, job type, health, finances, work motivation states, work centrality, motivational traits etc.	Retirement planning related measures
Self-Determination Theory. Deci & Ryan (1985, 2000)	Goal directed behaviour is instigated through qualitatively different forms of motivation. Distinguishes between autonomous and controlled motivation. Also distinguishes between intrinsic and extrinsic motivation	Luchak, Pohler, & Gellatly, 2008		Planned retirement age, gender, age, work limiting health, marital status, education et.	Satisfaction, Affective Commitment, Continuance commitment
Social Cognitive Theory of Self-Regulation. Bandura (1986, 1990, 1991, 1997, 2001) Wood & Bandura (1989); Zimmerman (1989, 1990, 1995, 2002, 2005)	Rooted in an agentic perspective in which individuals function as anticipative, purposive and self-evaluating proactive regulators of their motivation and actions.		Taylor-Carter, Cook & Weinberg, 1997	Leisure planning, financial planning, participation in retirement seminar	Retirement expectations and self-efficacy
Volition, Rubicon Model of Action Phase. Gollwitzer (1990) Heckhausen (1991)	Mind-set theory of action phases based on the distinction between motivation and volition. Prior to crossing the Rubicon (i.e., making a goal decision) motivational principles apply. Different cognitive procedures are activated when individuals tackle the task of choosing goals versus implementing them.		No empirical evidence found in relation to retirement decisions or retirement planning		

3.3 Introducing Regulatory Focus Theory

Regulatory Focus Theory (RFT) explains the underlying principles of approach-avoidance motivation. Based on self-discrepancy theory (Higgins, 1996c; Higgins et al., 1994) RFT proposes the existence of distinct regulatory systems that are concerned with meeting either nurturance or security needs. Self-regulation with regard to ideal self-guides, that represent an individual's hopes, wishes, or aspirations, satisfy nurturance needs and involve a promotion focus. Whereas, self-regulation with regards to ought self-guides, that represent an individual's duties, responsibilities, or obligations, satisfy security needs and involve a prevention focus. In other words, individuals strategically approach pleasure and avoid pain in different ways and this has major consequences for the understanding of individual motivation. Higgins (1997) suggests that the over-reliance on the hedonic principle of approaching pleasure and avoiding pain to explain motivation lacks sophistication. "It's time for the study of motivation to move beyond the simple assertion of the hedonic principle that people approach pleasure and avoid pain" (Higgins 1997, p.1280). Other research would disagree and maintain that, for example, individuals want to become happy and remain so through the absence of pain and presence of strong feelings of pleasure (Trope, Igou & Burke, (2006). Trope et al. (2006) reviewed research into mood as a goal but concluded that, in addition to the hedonic principle of approaching pleasure and avoiding pain, positive mood can serve as a resource in structuring goal pursuit. Individuals in a positive mood who are more attuned to the instrumental value of available courses of action as means for the attainment of higher level ends will set clearer priorities, select means according to those priorities and thus engage in more structured goal pursuit. For example Gervy, Igou and Trope (2005) demonstrated that "positive mood attunes

individuals to the relationship of goals and means, thus promoting actions that serve primary goals” (p. 269).

RFT suggests that nurturance-related regulation involves a promotion focus, whereas security related regulation involves a prevention focus. A promotion focus involves construal of achievement goals as aspirations whose attainment brings accomplishment. Commitment to these accomplishment goals is characterised by attempts to attain the highest expected utility. In contrast, a prevention focus involves construal of achievement goals as responsibilities whose attainment brings security (Shah and Higgins 1997). These desired end states may be termed “self-guides”. Therefore ideal self-guides, can be seen as individuals’ representations of desired end states as hopes or aspirations, and ought self-guides as individuals’ representations of desired end states as duties or responsibilities (Freitas, Liberman, Salovey and Higgins, 2002).

Higgins (1997) first described self-discrepancy theory (e.g., Higgins, 1987, 1989a) to explain how certain modes of caretaker-child interaction increase the likelihood that children will acquire strong desired end-states. These desired end-states represent either their own or significant others' hopes, wishes, and aspirations for them (strong ideals) or their own or significant others' beliefs about their duties, obligations, and responsibilities (strong oughts). Higgins (1997) describes how children's experiences of pleasure and pain and what they learn about self-regulation vary when their interactions with caretakers involve a promotion focus versus a prevention focus. For example, when the interaction involves a promotion focus the first caretaker-child interactions may include the presence of positive outcomes such as a hug and kiss for behaving in a desired manner, encouragement to overcome difficulties, or setting up opportunities to engage in rewarding activities. The same interactions may involve the pain of the absence of positive outcomes when caretakers, for example, end an activity as a result of the child’s negative behaviour. Pleasure and pain from these

interactions are experienced as the presence and the absence of positive outcomes, respectively. In both cases, the caretakers' message to the child is that what matters is attaining accomplishments or fulfilling hopes and aspirations, and it is communicated in reference to a state of the child that does or does not attain the desired end-state. Either "this is what I would ideally like you to do" or "this is not what I would ideally like you to do." The regulatory focus is one of promotion, a concern with advancement, growth, and accomplishment (Higgins, 1997).

Interactions that involve a prevention focus include the pleasure of the absence of negative outcomes when caretakers, for example, childproof the house, train the child to be alert to potential dangers, or teach the child to "mind your manners". The pain of the presence of negative outcomes may be experienced when the caretaker behaves roughly with the child to get his or her attention, yells at the child when he or she doesn't listen, criticises the child for making a mistake, or punishes the child for being irresponsible. Pleasure and pain from these interactions are experienced as the absence and the presence of negative outcomes, respectively. In both cases, the caretakers' message to the child is that what matters is insuring safety, being responsible, and meeting obligations, and it is communicated in reference to a state of the child that does or does not attain the desired end-state. Either "this is what I believe you ought to do" or "this is not what I believe you ought to do". The regulatory focus is one of prevention, a concern with protection, safety, and responsibility (Higgins, 1997).

RFT's contention is supported by previous theories of motivation. According to McClelland and Atkinson's classic theory of achievement motivation (e.g., Atkinson, 1964; McClelland, 1951, 1961; McClelland, Atkinson, Clark, & Lowell, 1953), over time, a new achievement task elicits the feelings associated with past task engagements. This produces feelings of pride

and orientates individuals to strive for behaviours that elicit feelings of pride and therefore use eagerness means to approach new goals. Those with a history of failure experience feelings of shame and are more inclined to use prevention-related vigilance when approaching new tasks or goals (Higgins, Friedman, Harlow, Chen-Idson, Ayduk and Taylor, 2001). In other words, regulatory focus theory proposes that promotion and prevention systems employ qualitatively distinct means of regulating towards desired end states as a result of socialisation and previous experiences. However, regulatory focus is not just an individual difference variable relevant to chronic personal preferences. Rather, it concerns different self-regulatory states. Individuals can be chronically predisposed to experience a particular state or it can be induced in them temporarily by properties of the current situation. In either case, individuals in a promotion focus state versus a prevention focus state will have different strategic inclinations. A promotion focus inclines individuals to approach a match with desired end-states, whereas a prevention focus inclines individuals to avoid mismatches to desired end-states (Higgins et al., 1994; Crowe & Higgins, 1997; Shah, Higgins, & Friedman, 1998 in Higgins et al. 2001). For example an individual who wants to pass an exam, which is a desired end state, could either study the day before the exam (approaching a match to the desired end state) or turn down an invitation to go to the cinema with friends the night before the exam (avoiding a mismatch to the desired end state). Specifically, individuals in a promotion focus are motivated to use eagerness means to ensure 'hits' (representing gains) and to ensure against errors of omission or 'misses' (representing non-gains). In contrast, individuals in a prevention focus are motivated to use vigilance means to ensure correct rejections' (representing non-losses) and to ensure against errors of commission or 'false alarms' (representing losses). For the promotion-focused individual, ensuring hits, by using eagerness means, guarantees ways of succeeding and avoiding the absence of positive

outcomes. For the prevention focused individual ensuring the correct rejections occur by being vigilant avoids the presence of negative outcomes and by not commissioning actions that could lead to errors, avoids mistakes.

Expectancy-Value model (for example Vroom 1964) assumes that goal commitment involves a motivation to maximise the product of value and expectancy and that both expectancy and value are required for goal commitment. Consistent with this "maximisation" proposal, empirical studies have often found that estimations of goal expectancy and value have both positive main effects on goal commitment and an independent positive interactive effect (Shah and Higgins, 1997). However, Shah and Higgins (1997b) did not find this assumption consistent among studies as some research failed to find an independent positive interactive effect. They proposed that differences in regulatory focus underpinned some decisions. Specifically, they suggested that making a decision with a promotion focus is more likely to involve the motivation to maximise the product of value and expectancy. These promotion focused individuals use the strategy of approaching matches to desired end states and pursue highly valued goals with the highest expected utility, thereby maximising the product of Value X Expectancy. Prevention focused decision making involves avoiding mismatches, in other words, don't take risks and only do what is absolutely necessary. This has a different impact on the product of Value X Expectancy. In this scenario highly valued prevention goals become necessities and individuals with a prevention focus must do everything to attain them. The expectancy information is less important in this pursuit. If ideals and oughts' are seen as the means by which one attains nurturance and security, then one may be more likely to commit to ideals that maximise the product of expectancy and value, whereas commitment to oughts' may occur when either expectancy or value is high. The product of expectancy and value,

therefore, should be higher for ideals than for oughts', controlling for differences in the main effects of expectancy and value (Shah and Higgins 1997b).

More recent research suggests that although the expected value of one's behaviour influences individual's motivation to engage in activities and are committed to a goal when it is highly valued and attainable, the importance of meaningfulness of the behaviour is not taken into account. Van Tilburg & Igou, (2013) suggest, "people regard behaviour as meaningful if it is associated with a valued goal and if it is an instrumental means for the pursuit of the valued goal". (2013. p. 375) They suggest that meaning-regulation processes play a critical role in attaining life satisfaction, happiness, wellbeing etc. Specifically that meaningful behaviours are likely to facilitate valued goal pursuit. The importance of this concept to this research thesis is suggested in the final paragraph of this chapter. Firstly, the biological basis of regulatory focus is outlined.

Approach and avoidance motivational systems are also hypothesised to be relatively independent, (e.g., Gray, 1987). "Being distinct, they may be managed by different structures in the nervous system" (1987 p. 320). Empirical evidence from neurophysiological investigations provides some support for separate structures. For example, Packer and Cunningham (2009) observed domain-specific effects of goal type and temporal distance. Specifically promotion goals were associated with heightened activity in medial PFC, short-term goals activated precuneus and anterior cingulate cortex, and longer-term goals activated frontal areas, including ventrolateral PFC and orbitofrontal cortex. Sutton and Davidson (1997) found that Gray's (1981) Behavioural Inhibition System (BIS) and Behavioural Activation System (BAS) constructs predicted different components of resting prefrontal asymmetry as measured with electroencephalographic (EEG) technology. Gray's (1981) model of personality has described two motivational systems, the (BIS) and the (BAS),

that control aversive and appetitive behaviour, respectively (Gray, 1981, 1982). This approach follows the tradition of Pavlov and Eysenck, postulating the existence of a small number of major personality dimensions, each of which rejects individual differences in the functioning of an independent neurological system. In the case of Gray's (1981) model, these systems reject brain structures that influence sensitivity to reinforcing events and control the experience of emotion. The BIS normally functions as a comparator, taking control of behaviour in response to signals of punishment, frustrative non-reward, and novel stimuli. In terms of individual differences in personality, the BIS is related to the trait-anxiety dimension. In accordance with the model, neurotic introverts should obtain higher scores in trait anxiety than stable extraverts. Gray (1981) described a second system called the Behavioural Approach System (BAS; Gray, 1981) or the Behavioural Activation System (BAS; Fowles, 1980) that was independent of the BIS. The BAS is a conceptual system responsible for approach behaviour in response to incentives signals of reward or non-punishment.

Zhu and Meyers-Levy (2007) explored the cognitive mechanisms that underlies regulatory focus and found that promotion-focus individuals engage in relational elaboration, which entails identifying commonalities or abstract relationships among disparate items. In contrast, prevention-focus individuals engage in item-specific elaboration, which involves focusing on specific attributes of each item independent of others.

Key to understanding how individuals implement their retirement preparation strategies is understanding the individual differences of self-regulatory orientations. RFT, detailed above, proposes that these differences involve complex processes beyond that of just approaching pleasure or avoiding pain. As suggested above the expectancy x value hypothesis proposed by van Tilburg and Igou (2013) suggests that individuals regard behaviour as

meaningful if it associated with a valued goal and is instrumental in the pursuit of the goal. How highly valued a goal is depends on individual or contextual characteristics. Understanding these processes gives us an opportunity to examine retirement preparation strategies in a novel way. We know that individuals may be either promotion focused or prevention focused by virtue of their early childhood socialisation experiences. These chronic inclinations affect their means of regulation with promotion focused individuals more inclined to use eager approach type strategies to achieve their goals compared to prevention focused individuals who use vigilant avoidance type strategies to achieve theirs. These differences in how individuals pursue goals will impact on the outcomes of the retirement preparation process that they experience. In order to fully understand what this impact is likely to be we must first explore the implications that using approach or avoidance strategies have for achieving meaningful goals and more importantly for maximising positive outcomes from implementing the appropriate approaches for the individual concerned. The implications for this regulatory fit versus non-fit between regulatory orientation and means of goal pursuit proposed by Higgins are discussed in the next section.

3.4 Regulatory Focus Influence on Decision Making

Research on hypothesis generation indicates that a promotion focus is associated with generating more and simultaneously endorsing multiple hypotheses, whereas a prevention focus is associated with generating only a few hypotheses and selecting one hypothesis from a given set (Liberman et al 2001). Regulatory Focus Theory (RFT) also suggests explanations as to how individuals make decisions and choose from the multiple hypotheses that they generate. Prospect Theory (Kahneman & Tversky, 1979, 1984) states that individuals psychologically transform stated (objective) probabilities into

weighted probabilities in a non-linear fashion, specifically individuals overweight very low probabilities and underweight very high probabilities. Results of their experiments showed that for prevention conditions the underweighting of probabilities had a greater effect than did overweighting of probabilities in the promotion conditions. Individuals with a prevention focus will have heightened sensitivity to information regarding threat and safety and therefore will avoid decisions that involve any threat, even if there is only 1% chance of failure, then they will not opt for the decision that contains that probability. Prospect theory also holds that decision-making outcomes are strongly dependent on whether the outcomes are framed in terms of gains or losses (Tversky & Kahneman, 1981 in Igou & Bless, 2007). Igou and Bless (2007) hold that framing effects are impacted on by the level of effortful constructive processing involved and this in turn is influenced by the level of subjective concepts that are employed to enrich the problem scenario.

Research, on risky behaviours, reveals that in situations involving loss, prevention motivation but not promotion motivation (whether measured or manipulated) was uniquely associated with behaviours that served the motivation to maintain the status quo (Scholer, Fujita, Zou, Stroessner & Higgins, 2010). When the risky option offered the sole possibility of returning to the status quo, prevention motivation predicted increased risk seeking. However, when a more conservative option was available that also offered the possibility to return to the status quo, prevention motivation predicted risk aversion. When neither option offered the possibility to return to the status quo, prevention motivation was not associated with risky choice. Perhaps one of the difficulties facing some individuals is that decisions involve choices between maintaining stability or facing change. Liberman, Idson, Camacho and Higgins (1999) found that when faced with task substitution as a strategy for choosing

between the two decisions described above, promotion focused individuals were more inclined to do a substitute task than resume an interrupted task.

The relationship between regulatory focus and creative thought has been explored to establish if processing style was influenced by an individual's regulatory focus (Freidman & Forster, 2001). Building on the work of Crowe and Higgins (1997) that hypothesised that individuals with a promotion focus were more likely to take risks and respond in the affirmative, than their prevention focused counterparts, and therefore be more amenable to abstract thinking and creativity. They showed that the risky explorative processing style elicited by promotion cues facilitates creative thought. Baas, DeDreu and Nijstad (2008) found that creativity is enhanced by positive mood states associated with an approach motivation and promotion focus (e.g., happiness), rather than those associated with an avoidance motivation and prevention focus (e.g., relaxed). Negative, deactivating moods with an approach motivation and a promotion focus (e.g., sadness) were not associated with creativity, but negative, activating moods with an avoidance motivation and a prevention focus (fear, anxiety) were associated with lower creativity, especially when assessed as cognitive flexibility.

Political decision-making has been known to contain “risky” or “conservative” strategies about economic reform under good, average, or poor economic conditions involved both promotion-related (i.e., eagerness) and prevention-related (i.e., vigilance) strategies (Boldero and Higgins, 2011). Strategic vigilance was associated with making a conservative choice, whereas strategic eagerness was associated with making a risky choice. In addition, along with perceptions of economic conditions, chronic strength of prevention focus or situationally induced prevention focus was associated with using strategic vigilance, whereas chronic strength of promotion focus or situationally induced promotion focus was associated with using strategic eagerness.

There are also social and interpersonal implications of regulatory focus. Shah, Brazy & Higgins, (2004) demonstrated that regulatory focus influences individuals' behavioural responses to in-group and out-group members. The strength of participants' promotion focus predicted the degree to which participants choose to sit closer to the chair identified as a teammate's, whereas the strength of their prevention focus predicted the degree to which participants choose to sit further from a chair identified as a competitor's. Shah and Higgins (2001) examined the strength of regulatory focus influence on individuals' efficiency in making emotional appraisals of common attitude objects. It was predicted that individuals with a strong promotion focus would be especially efficient in emotionally appraising attitude objects along the cheerfulness-dejection dimension whereas individuals with a strong prevention focus would be especially efficient in emotionally appraising attitude objects along the quiescence-agitation dimension. As predicted participants' ideal strength (promotion focus) was uniquely related to how quickly they appraised the objects in terms of cheerfulness and dejection, whereas participants' ought strength (prevention focus) was uniquely related to how quickly they appraised the same objects in terms of relaxation and agitation.

In addition to specifying individuals' behavioural and affective manifestations of intergroup bias, regulatory focus may also specify individuals' sensitivity to bias from others. As prevention focus is associated with sensitivity to the presence or absence of negative outcomes, individuals with a prevention focus may be particularly vulnerable to the threat posed by negative stereotypes. Brazy and Shah (2005) sought to examine the possible moderating influence of regulatory focus motivations on the effects of stereotype threat and their results showed that regulatory focus significantly moderated the relationship between stereotype threat and gender. For individuals with a prevention focus, women performed significantly worse on the numerical task

when it was described as gender-biased, than nonbiased. Individuals with a promotion focus were not as vulnerable to the threatening information, finding as many solutions to the problems as those given the non-biased instructions.

While CLT offers an explanation of decision making that includes underweighting of contextual and incidental features (Gilbert & Wilson, 2007; Kahneman, et al., 2006; Wilson & Gilbert, 2003); increases in the impact of high-level information and decreases in the impact of low-level information (Trope & Liberman, 2010) and increases in the relative weight placed on aggregate vs. individualised information (Ledgerwood, et al., 2010). All of which are a result of the complex effects of time distance (Zauberman and Lynch, 2005). However, as the research reviewed above demonstrates, RFT offers an even more detailed explanation of the cognitive processes underlying self-regulatory processes of promotion and prevention. It shows that regulatory focus influences the number of hypotheses individuals generate when making decisions and also how they weigh up the probabilities of the possible outcomes of those hypotheses. It also showed that regulatory focus influence risk taking, abstract thinking and creativity and determines the strategic inclinations regarding the choices made. Regulatory focus was also shown to influence behaviours related to in-group and out-groups and reactions to emotional attitude objects. These in turn influenced the sensitivity to bias promotion and prevention focused individuals experienced.

The next section explores this further by examining the relationship between RFT and affect. This is followed by the introduction of the concept of “fit” versus “non-fit”. It is the contention of the current research that, while CLT also offers an explanation of the effect of temporal distance and decision making, this research contends that an individual’s chronic regulatory orientation will have a greater impact on the outcomes from these decisions.

The implications of this are explored in the final study along side the main model variables.

3.5 Regulatory Focus and Affect

Anticipated stressors, such as impending examinations, evaluations, or performances, often elicit protracted anxiety and coping responses (Raffety, Smith and Ptacek, 1997). Major depressive disorder (MDD) and generalized anxiety disorder (GAD) are highly prevalent and frequently comorbid diagnoses. A majority of individuals with MDD report a lifetime history of one or more anxiety disorders (Fava, Rankin, Wright, Alpert, Nierenberg, Pava, & Rosenbaum, 2000; Kaufman & Charney, 2000; Kessler, Nelson, McGonagle, Edlund, Frank, & Leaf, 1996). It is crucial to distinguish between occasional and chronic self-regulatory failure because theories such as RFT postulate that the two scenarios would have very different consequences (e.g., Karoly, 1999; Strauman, McCrudden, & Jones, 2010). Intermittent, routine failure in personal goal pursuit is presumed to be a ubiquitous experience, and the acute negative affective state that results, is likely to serve the purpose of helping the individual adapt her/his goal pursuit in more effective ways. Chronic self-regulatory failure, on the other hand, increases vulnerability to pathogenic changes in the overall functioning of the two systems that, in turn, increases risk for psychopathology (Klenk, Strauman and Higgins, 2011). Promotion system failure results in reduced eagerness and can effect promotion focused individuals belief in what promotion goals are attainable. This can reduce experiences of positive and affective outcomes and if not interrupted can become a self-perpetuating cycle leading to negative self-evaluation. For example, Miller and Markman (2007) examined relationships between chronic regulatory focus

and motivation among a group of individuals experiencing hopelessness depression (HD) symptoms during a period of academic pursuit. Results indicated that the degree of HD symptoms positively related to prevention focus and negatively related to promotion focus, and the negative relationships between HD symptoms and both motivation and performance outcomes were mediated by (lack of) promotion focus.

Chronic prevention failure, meaning that an individual perceives her or himself as continuously failing to “keep bad things from happening”, on the other hand, leads to stronger engagement of the system. Under such circumstances, the individual would be likely to experience feelings of being at risk or in danger, resulting in increased effort to be vigilant and avoid further harm (i.e., increased prevention focus). As a result, complex or ambiguous social stimuli would likely be interpreted as situations in which danger must be avoided rather than as opportunities for success. Such heightened accessibility of prevention goals would both maintain a vigilant emotional state and make it more difficult for the individual to use promotion-focused goal pursuit strategies where appropriate. In addition, vigilance is a fit for the prevention system that would strengthen engagement in safety-related and responsibility-related goal pursuits (Klenk et al., 2011).

Research has shown that the presence of optimistic (e.g., Weinstein, 1980) and pessimistic (e.g., Norem & Cantor, 1986) biases provides arguments for the functionality of both significant mood disorders and what, for the majority of individuals, are coping mechanisms for dealing with difficult decisions (see Norem & Illingworth, 1993; Scheier & Carver, 1993). Given that both optimistic and pessimistic outlooks may convey some benefits, Sackett and Armor (2010) have developed a framework for understanding when and why individuals might selectively shift between an optimistic or pessimistic outlook (see also, Armor, Massey, & Sackett, 2008). Hazlett, Molden and Sackett (2011)

demonstrated that motivations for promotion, which focus on gains and advancement, are related to, and are sustained by, a preference for optimistic forecasts, which tend to produce eagerness for gains. In contrast, they showed that motivations for prevention, which focus on security and protection from loss, are related to and sustained by a preference for pessimistic forecasts, which tend to produce vigilance against loss.

It is clear from the research reviewed in this section that sometimes individuals are influenced by circumstance, to pursue goals that are not a match for their chronic regulatory focus. The consequence of this non-fit, as against fit, between chronic focus and goal choice is explored in the next section and the antecedents of such non-fit and fit are reviewed.

3.6 Regulatory Fit

Higgins' theory (2000) of regulatory fit proposes that motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one's orientation lends a subjective sense of importance to the activity. The fit in other words is the relationship between a person's orientation to an activity and the means used to pursue that activity.

If goal pursuits with higher regulatory fit have greater value than those without, then (a) individuals will be more inclined toward goal means that have higher regulatory fit, (b) individual's motivation during goal pursuit will be stronger when regulatory fit is higher, (c) individual's (prospective) feelings about a choice they might make will be more positive for a desirable choice and more negative for an undesirable choice when regulatory fit is higher, (d)

individual's (retrospective) evaluations of past decisions or goal pursuits will be more positive when regulatory fit was higher, and (e) individuals will assign higher value to an object that was chosen with higher regulatory fit. (Higgins, 2000 p.1219)

An eager strategy sustains a promotion focus (fit), whereas it disrupts a prevention focus (non-fit). A vigilant strategy sustains a prevention focus (fit), whereas it disrupts a promotion focus (non-fit). Given these differences in what creates fit and non-fit, one would expect that individuals with a promotion focus would prefer to use eager (rather than vigilant) strategies to pursue their goals, and individuals with a prevention focus would prefer to use vigilant (rather than eager) strategies. This is, indeed, the case (see Higgins, 1997, 2000; Higgins & Spiegel, 2004). This fit effects strength in engagement in task activity (Forster, Higgins & Idson, 1998). Studies using anagram tasks showed that this holds for both situational and chronic instantiations of regulatory focus orientations. (Shah et al., 1998; Freitas, Liberman, & Higgins, 2002).

A fit between an action's strategic orientation and the actor's regulatory state can influence the amount of enjoyment the action provides (Freitas & Higgins, 2002). In two studies, using different methods of manipulating regulatory states and of gauging action evaluations, high regulatory fit increased participants' anticipations of action enjoyability. In a third study, high regulatory fit increased participants' enjoyment of, perceived success at, and willingness to repeat a novel laboratory task, and these effects were independent of participants' actual success on the task. Across the three studies, participants in a regulatory state oriented toward accomplishment experienced eagerness-related actions more favourably than vigilance-related actions, whereas participants in a regulatory state oriented toward responsibility experienced vigilance-related actions more favourably than eagerness-related actions. Bianco, Higgins, and Klem (2003) also investigated the effects on performance from

regulatory fit on increasing strength of engagement. Instead of the fit between regulatory focus orientations and eager-versus-vigilant means, they examined the fit between individual's implicit theories of a given task being either a fun task or an important task. They found that performance was enhanced when there was a fit (vs. a non-fit) between participants' implicit theories of task fun or importance and task instructions of fun or importance.

Whether the value experienced from regulatory fit could transfer to a subsequent evaluation of an object is also an interesting concept. In a number of experiments, Higgins, Freitas, Idson & Molden, (2003) concluded that individuals will place a higher value on objects when they chose them with a strategy that fits their orientation than a strategy that did not fit. The value transfer from both promotion orientation that utilised eager strategies and prevention orientation that utilised vigilant strategies were shown to be independent of positive mood, perceived effectiveness and perceived efficiency (Higgins, et al., 2003). Speiggle, Grant-Pillow and Higgins (2004) demonstrated that fit between regulatory focus and strategic outcome framing influences the effectiveness of health messages in changing behaviour. They found that when the goal of eating more fruits and vegetables was represented as a promotion-focused health issue, messages that had participants imagine potential benefits from success in diet change were more effective than messages that had participants imagine potential costs from failure in diet change. The opposite was found when the goal of eating more fruits and vegetables was represented as a prevention-focused health issue. This resulted in an increase of over 20% in the number of servings of fruits and vegetables consumed by individuals with regulatory fit over those with non-fit during the week following their reading of the message.

Other studies propose that engagement in health care-taking behaviours is most likely among vigilant health worriers, and that willingness to engage in

risky health behaviours in pursuit of other eagerness-related goals is most likely among those with a promotion-focused style of goal pursuit (Uskul, Keller & Oyserman, 2008). They found that prevention fit correlated with health care-taking behaviours and with readiness to engage in cancer detection behaviours. Promotion fit correlated with using stimulants to overcome physical weakness.

Regulatory fit has also been shown to be relevant to tasks such as resisting temptations and overcoming distractions during goal pursuit. In a number of studies carried out by Freitas et al. (2002) it was found that whether deciphering encrypted messages or solving math problems, when exposed to attractive distracting video clips, participants in a prevention focus reported greater task enjoyment than did participants in a promotion focus, whereas the reverse was true when the distracting clips were not presented. Indeed, prevention-focused participants enjoyed the tasks more when they had to resist temptation than when they did not. In one of their studies, prevention-focused participants outperformed promotion-focused participants under distracting (but not non-distracting) conditions, and regression analyses suggested that task enjoyment mediated this effect.

The research reviewed thus far shows that an eager strategy sustains a promotion focus while a vigilant strategy sustains a prevention focus. This fit effects strength in engagement, influences the amount of enjoyment an action provides and these experiences for one object can transfer to subsequent evaluations of other objects. Therefore, the fit between chronic regulatory focus and the type of strategies pursued has implications for an individual's experience of actions such as preparing for retirement. Koenig, Cesario, Molden, Kosloff and Higgins (2009) examined the subjective experiences of "feeling right" from regulatory fit and of "feeling wrong" from regulatory non-fit and how that may influence the way individuals process persuasive messages. They found incidental experiences of regulatory fit increased reliance on source expertise

and decreased resistance to counter persuasion, whereas incidental experiences of regulatory non-fit increased reliance on argument strength and increased resistance to counter persuasion. Regulatory fit theory proposes that the effect of regulatory fit on the value of a decision actually involves two important components: a “feeling-right” component and a strength-of-engagement component (Avnet & Higgins, 2006b). The feeling-right component is related to individual’s feelings about their decision activity, suggesting that the activity itself is experienced as being better when the manner of the decision making sustains or fits their current regulatory orientation (Freitas & Higgins 2002; Higgins 2000). Other studies found that regulatory fit can be evoked through mere thought, without actual goal pursuit and even without engagement in the goal pursuit strategies (Leikas, Lindeman, Roininen & Lahteenmaki, 2009). Again, examining the “feeling of regulatory fit”, they explored the minimum of involvement necessary to evoke regulatory fit. For example, giving participants either rich or accurate information concerning vegetable sterols and evoking beliefs that they used eager or vigilant information search strategies through a manipulation task (Leikas et al., 2009). In reality, all participants received the same information. Participants in promotion focus reported more positive attitudes in the rich information condition, whereas prevention-focused participants reported more positive attitudes in the accurate information condition.

As the research reviewed above suggests, the result of regulatory fit is more positive, it feels right, than non-fit. Regulatory fit is also related to the motivational force that individuals experience when making a decision. Regulatory fit that creates a feeling right experience does not only intensify positive reactions, nor does it change the value of a reaction like that derived from a positive mood. The consequences derived from regulatory fit feeling right experience has the same effect on both positive and negative reactions. It would

be important therefore that in so far as possible those individuals should strive to utilise strategies that match their regulatory orientation. The following sections explore some of the influences that can cause a disruption in dispositional regulatory focus, which has the potential to influence individuals to use of strategies that does not fit their chronic regulatory orientation.

3.7 Regulatory Focus and Temporal Distance

Revisiting the fundamental principles of Regulatory Focus Theory, it is important to distinguish between promotion focus and prevention focus goals. Promotion focus may be said to involve maximal goals, whereas prevention focus involves minimal goals (Brendl & Higgins, 1996; Freitas, et al., 2002; Idson, Liberman, & Higgins, 2000). A maximal goal reflects the most that one could wish for, whereas a minimal goal reflects bare necessities or the least one could comfortably tolerate. A key distinction between these two types of goals centres on the boundary of focus, i.e., whether one tends to focus on potential variation above or below the goal point. For maximal goals, individuals focus on the upper boundary—the range of higher and better outcomes surpassing the goal point (e.g., an Olympic athlete might strive toward getting onto the medal stand, but nevertheless imagine what it might be like to get the bronze, or the silver, or the gold, or even to set a new world record). By contrast, for minimal goals, individuals strive to keep from falling below a minimally acceptable outcome, focusing on holding at bay a range of inferior possible outcomes (e.g., an Olympic athlete might strive to preserve the honour of his nation by not scoring in the bottom half). In short, maximal goals involve an unbounded upper range of ever more desirable possibilities, whereas the scope of action for minimal goals involves the lower range of unwanted possibilities (Pennington & Roese, 2003).

In one direction, it could be said that plentiful time as a resource allows for luxury of maximal goals whereas shortage of time would cause the implementation of prevention type behaviour and favour minimal goals. In the opposite direction the effect of regulatory focus on temporal distance, promotion vs. prevention differentially constrain the bounds of temporal imagination. Maximal goals offer an unbounded upper limit, meaning that they minimally constrain ambition. Therefore, promotion relative to prevention focus invites goals that demand more time to prepare, more time to implement, more time to complete, and overall that occupy a mental space more temporally removed from the here-and-now. In a series of studies, Pennington and Roese (2003) found that when goals are temporally distant, individuals place greater weight on promotion than prevention. When looking to the future, as temporal distance increased, promotion goals grew while prevention goals remained constant. Looking to the past, as temporal distance increased, promotion goals remained constant while prevention goals shrank.

The research reviewed here suggests that actual and/or psychological distance from the retirement event will influence the perception individuals have of the resources they have. This should lead to, those who experience greater distances, feeling that they have a cushion in time and, therefore, in resources and will make more risky decisions in an attempt to pursue maximal goals. The opposite being true for those who have shorter distance to retirement and do not have the luxury of time. They also perceive that they have less access to resources and restrict their strategies to cautious actions in order to achieve their minimal goals. This implies that temporal distance has the potential to disrupt an individuals preferred strategy, one that matches their chronic regulatory orientation and, therefore, induce a non-fit and a “not feeling right” about their actions. In these situations the present research contends that this

will have a negative impact on the outcomes experienced by individuals, whose strategic choices are disrupted, as they approach retirement.

3.8 Regulatory Focus and Construal Level

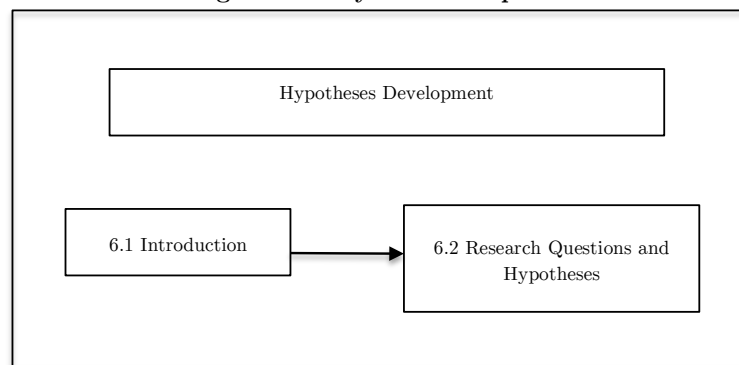
As suggested in the previous section research into construal level reveals that as temporal distance (proximity) to an event or object approaches, that event or object is construed at a more concrete level. Research investigating the relationship between regulatory focus and construal level indicates that promotion-focused individuals are more likely to construe information at abstract, high levels, whereas those with a prevention focus are more likely to construe information at concrete, low levels (Lee et al., 2009). Further, such fit (vs. non-fit) between an individual's regulatory focus and the construal level at which information is represented leads to more favourable attitudes. This supports the suggestion in the previous sections that regulatory focus for reduced temporal distance focuses the mind on minimal goals, which in their nature require more concrete and less abstract thinking. This relationship between RFT, CLT and temporal distance is fundamental to fully understanding the individual strategic approaches that individuals adopt in preparation for their retirement and their consequent impact on expected outcomes of the retirement process.

It is noteworthy that the behaviour identification form has been used to study the relationship between abstraction and psychological distance (e.g., Fujita, Henderson, et al., 2006; Libby, Shaeffer, & Eibach, 2009; Liberman & Trope, 1998), decision making (e.g., Polman, 2012), social judgment (e.g., Luguri et al., 2012), and affect (e.g., E. R. Watkins, Moberly, & Moulds, 2011). While not the main focus of the present research programme, a measure of construal level included to allow an exploratory analysis of the relationship

between construal level and regulatory focus. The following chapter outlines the development of specific hypotheses to test the contentions made in the preceding chapters of this literature review.

Chapter 4 Hypotheses Development

Figure 4.1 Layout of Chapter 4



4.1 Introduction

The main aim of the present research programme is to examine the individual level motivational processes underlying the approaches to goal pursuit during the retirement process. An overview of the research questions in this thesis are detailed in the following sections and the final model is depicted in Fig 4.3 below. To arrive at this final model, a comprehensive review of the literature revealed a number of gaps in how previous studies have assessed the consequences of preparing for retirement. This research demonstrates that RFT (Higgins, 1997, 2000) offer us an opportunity to gain a deeper understanding of the processes underlying “how” individuals implement retirement preparation strategies. Previous retirement research focused on assessing retirement as an end of life transition and concentrated on the antecedents of retirement decisions, including the timing of retirement and focused on demographics, health, finances, work conditions (Fouquereau, et al., 2001; Taylor and Shore 1995; Beehr, Glazer, Nielson & Farmer, 2000). As well as decisions to retire, these studies also focused on the consequences of retirement decisions with

reference to retirement satisfaction and adjustment by relying either on reports from samples that were already retired to predict how individuals preparing for retirement may feel about their retirement preparations, a retrospective approach. Other research used measurement instruments that were designed with retirees and re-phrased the questions requiring working participants to predict how they might feel in the future, a prospective approach.

As discussed in the earlier chapters, the changing context of retirement has led to a need to reconceptualise retirement. Beehr's (1986) conceptualisation of the process of retirement has impacted on more recent research into retirement. Considering retirement decisions from a continuity theory perspective (Atchley, 1989) brings into focus the continuity between the factors in play preceding and following retirement. When combined with the concept that retirement planning points to the existence of many pathways to retirement, this leads to a view that retirement decisions are part of a long-term sequence within the lifespan (Setterson, 2003, in Topa et al, 2009). This produces a more complex view of retirement and one that considers the personal context, interdependence between vital spheres involved in retirement, the importance of considering moments within the process and the existence of diverse pathways or possible trajectories as key to understanding personal wellbeing after retirement (Topa et al, 2009). Despite the relationship between retirement decisions and retirement planning, Beehr (1986) suggests theoretical reasons to assume that preference or plans and decisions are not simply equivalent or exchangeable. Recent research demonstrated that some antecedents do explain retirement decisions better than retirement planning and visa versa. In fact, in their meta-analysis of the antecedents and consequences of retirement decisions and retirement planning, Topa et al. (2009) found that the antecedents predict retirement planning better than they did retirement decisions. They suggest that this may be due to the fact that individuals in

general perceive little control over retirement decisions. A common theme that has emerged in this recent research is the lack of adequate measures for retirement planning. Muratore and Earl (2010) addressed this by developing a new measure of retirement planning behaviours, the “Retirement Planning Questionnaire 2” (RPQ2). However, their approach focused on identifying the antecedents of retirement planning and not on how these antecedents were implemented. Another attempt to address the lack of a measure for retirement planning was carried out by Petkoska and Earl (2009). Their “Retirement Planning Questionnaire” contained 36 items and four factors covering the planning domains of Financial/general; Health; Interpersonal/leisure and Work. Again while they addressed the wider scope of antecedents that the recent research studies have been calling for they did not address the issue of implementation differences. The resource perspective assumes that resources are critical to wellbeing. Resources refer to the capacity that one values or uses to fulfil his or her valued needs and goals (Hobfoll, 2002; in Leung and Earl, 2012). The retirement resource inventory (RRI, Leung & Earl, 2012) focused on the antecedents of retirement adjustment and satisfaction. While Leung and Earl did include a measure of goal pursuit approaches, these were not linked to any individual differences. Their study was also carried out among retirees and does not tell us much about the role of goal pursuit strategies among pre-retirees.

As with the other studies described in this section (for an overview see Fig 4-2 below) the role of goals, while highlighted as important to retirement well-being, have not really been examined in terms of different strategic implementation approaches and how this impacts on the consequences of retirement planning. It is the contention of this research thesis that RFT (Higgins, 1997, 2000) offer us an opportunity to gain a deeper understanding of the processes underlying “how” individuals implement retirement preparation strategies. Regulatory Fit Theory (Higgins, 2000, Higgins et al., 2001) will also

show that the levels of pre-retirement anxiety and positive and negative affect that individuals experience during their preparation for retirement is impacted, if the manner in which an individual pursues their retirement preparation strategies sustains or fits their current regulatory focus. The dependent variables used in this research will also be current measures and which will offer a more insightful view of the impact the dependent variables on individuals' feelings regarding their impending retirement.

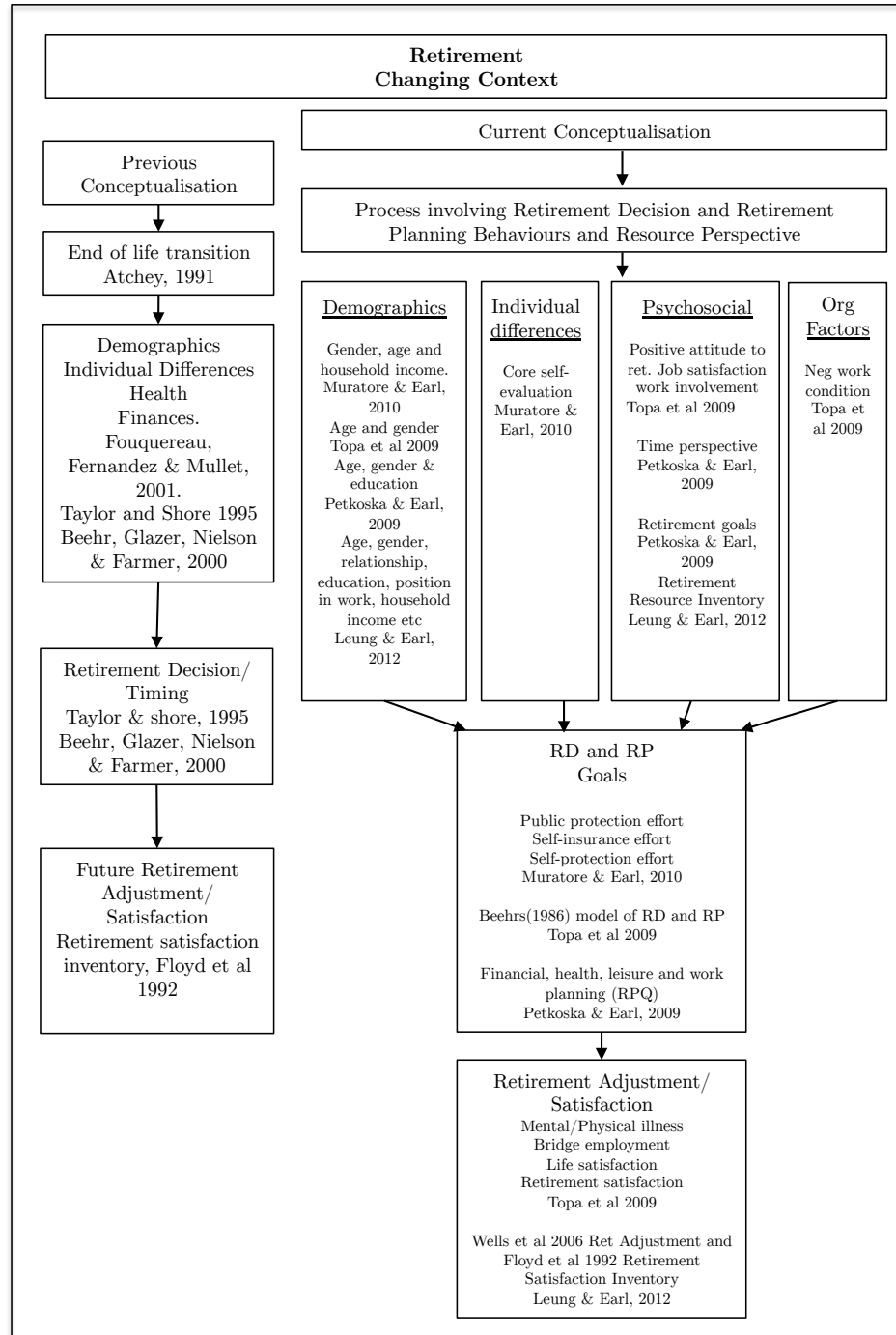
4.2 Research Questions and Hypotheses

The first proposition is that by applying regulatory focus theory (Higgins, 1997) it should be possible to establish retirement preparation strategies that are representative of either a promotion focus or a prevention focus. This led to the development of the first research question:

Research Question 1: *Does prevention (promotion) focused priming elicit prevention (promotion) focused retirement preparation strategies?*

Higgins (1997) contends that goals can be distinguished as either “Promotion goals” which are concerned with achieving hopes, wishes, and aspirations, and are thus likely to involve an approach strategy; or “Prevention goals” which are concerned with duties and obligations and thus likely to involve an avoidance strategy (Higgins et al 2001). He also suggests that individuals can be chronically or situationally oriented to be promotion or prevention focused.

Figure 4.2 Overview of the Changing Context of Retirement



Promotion focused individuals are sensitive to information that reflect hopes and aspirations whereas prevention focused individuals are sensitive to information that reflect duties and obligations. Research into message persuasiveness denotes that supraliminal semantic word priming techniques (Bargh & Chartrand, 2000; Higgins & Chaires, 1980) work by activating semantic networks in an individual's cognition. Semantic networks are networks of words and concepts built in the brain through prior experience (Martin and Chao 2001 in Bartelt, Dennis, Yuan, & Barlow, 2013)). Research has shown that accessing semantic networks through words can activate abstract concepts and categories that ultimately affect behaviour (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). Therefore presenting individuals with open-ended questions containing semantically primed wording should situationally induce a promotion or prevention focus and activate the individuals' semantic networks. This should in turn produce strategies that are distinguishable as either promotion or prevention type. These questions will be addressed in study one. Full details of the specific design are given in Chapter 8.

Research Question 2: *Will individuals choose retirement strategies (e.g., prevention-focused strategies) that match their chronic regulatory orientation (e.g., prevention orientation)?*

As detailed in the previous section, individuals can be chronically or situationally oriented to be promotion or prevention focused. In order to check if regulatory orientation influences the strategies developed in Study 1, Study 2 will measure individuals' chronic regulatory orientations. For the purposes of achieving a good methodological fit Study 2 adopts a measure of General Regulatory Focus Measure Strength (GRFM) as proposed by Kunda, McGregor, & Goel, 2010. This measure is presented initially and then following

a short distractor question, the strategies will then be presented in a random order and participants will be asked to choose which they prefer. The promotion orientated individuals' sensitivity to information that reflects hopes and aspirations should influence their choices. Equally the prevention orientated individuals' sensitivity to information that reflects duties and obligations should influence their choice. The contention of the present research is that chronic promotion orientated individuals will choose more promotion type strategies compared to chronically prevention orientated individuals who will choose more prevention type strategies.

Hypothesis 1: Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.

Hypothesis 2: Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies.

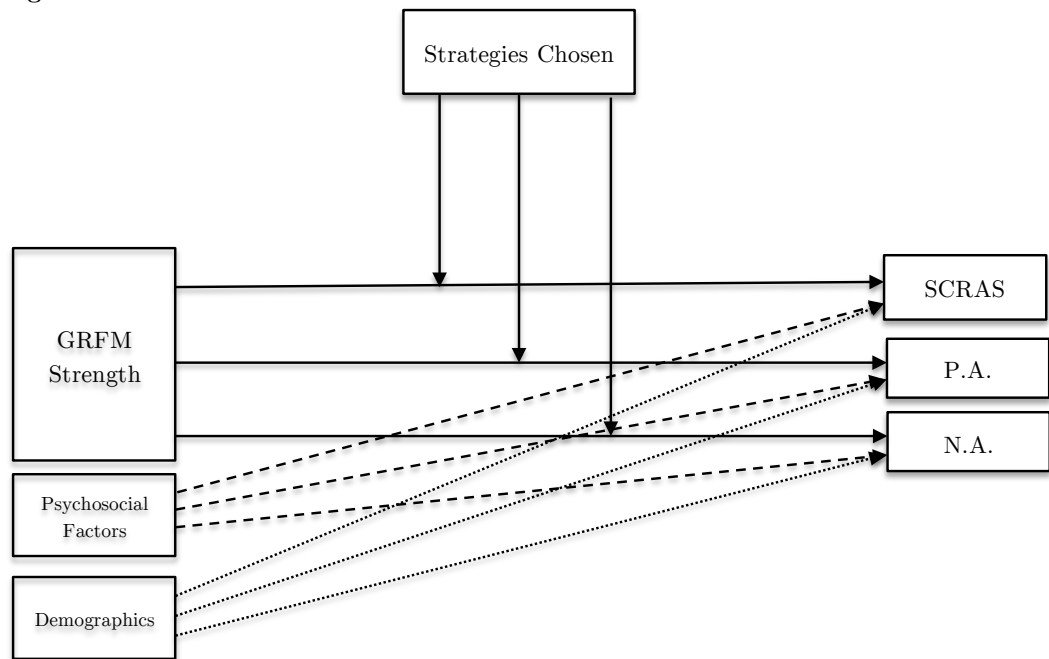
Research suggests that continuous variables should not be divided by using a median split (see Irwin & McClelland, 2003 and McCallum, Zhang, Preacher & Drucker, 2002 for example). By treating the chronic measure for general regulatory focus as an indicator of the individual's promotion strength, then greater promotion strength should lead to the choosing of more promotion strategies compared to prevention strategies. Therefore, the following hypothesis is proposed:

Hypothesis 3: General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen.

Research Question 3: *What are the implications of a match between chronic orientation and the type of strategies chosen for individuals approaching retirement?*

The final study addresses the broader question of what implications a match between chronic orientation and type of strategies preferred have on the individuals that are approaching retirement. This final model is depicted in Figure 4.3.

Figure 4.3 Final Model



Solid lines represent interactions between main model variables.

Dashed lines represent interactions between psychosocial control variables and dependent variables.

Dotted lines represent interactions between demographic control variables and dependent variables.

In Study 2 participants were divided into promotion and prevention groups by subtracting their promotion scores from their prevention scores and using a median split to produce the two groups. As mentioned above a lot of research suggests that continuous variables should not be divided by using a

median split (see Irwin & McClelland, 2003; McCallum et al., 2002 for example). Study 2 addressed this concern by testing the association between GRFM Strength and the number of promotion strategies chosen. For the purposes of verifying the results of Study 2, the same statistical procedures were repeated with the same measures but with the new sample. This also serves to further confirm the new set of retirement strategies developed in Study 1.

Hypothesis 4: Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.

Hypothesis 5: Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies.

Hypothesis 6: General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen by participants of Study 3.

One of the main aims of the final study is to examine the effects that regulatory focus and the type of strategies individuals choose have on individuals approaching retirement. Beginning with chronic regulatory focus it is suggested that motivations for promotion, which focus on gains and advancement, are related to and sustained by a preference for optimistic forecasts, which tend to produce eagerness for gains. In contrast, motivations for prevention, which focus on security and protection from loss, are related to and sustained by a preference for pessimistic forecasts, which tend to produce vigilance against loss. RFT also postulates that generalised anxiety disorder is a prevalent condition and that intermittent, routine failure in personal goal pursuit is presumed to be a ubiquitous experience, and the acute negative

affective state that results is likely to serve the purpose of helping the individual adapt her/his goal pursuit in more effective ways. In order to test the effects of chronic regulatory focus on anxiety and affect, three outcome measures are included in the final model (Fig 4.3). The instrument chosen to measure pre-retirement anxiety was the social components of retirement anxiety (SCRAS, Fletcher & O'Hansson, 1991). The final model contends that a stronger promotion focus will in fact reduce the levels of pre-retirement anxiety felt by individuals approaching retirement.

Hypothesis 7: GRFM Strength will be negatively associated with pre-retirement anxiety.

The positive affect negative affect schedule (PANAS, Watson et al., 1988b) was included in the final model to measure for affect. As discussed in Chapter 3 section 3.3 motivations for promotion are sustained by a preference for optimistic forecasts as against those for prevention, which are sustained by pessimistic forecasts. Also, Summerville and Roesse stated that when defined in terms of reference-points, promotion focus is associated with positive affectivity whereas prevention focus is associated with negative affectivity. Therefore we expect promotion-oriented individuals to experience more positive affect compared to prevention-oriented individuals. The final model proposes that chronic regulatory focus strength will be positively associated with positive affect (PA) and negatively associated with negative affect (NA).

Hypothesis 8: GRFM Strength will be positively associated with positive affect (PA).

Hypothesis 9: GRFM Strength will be negatively associated with negative affect (NA).

Higgins regulatory fit theory (Higgins et al., 2001) proposes that motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one's orientation lends a subjective sense of importance to the activity. The fit in other words is the relationship between a person's orientation to an activity and the means used to pursue that activity. Regulatory fit theory is tested by assessing the impact of fit between chronic focus and the type of strategies preferred on the feelings of pre-retirement anxiety and positive and negative affect.

Therefore, the type of strategies chosen (promotion type or prevention type) should moderate the relationship between GRFM strength and pre-retirement anxiety such that the relationship will be more negative when the number of promotion strategies chosen is higher. In other words individuals with greater promotion strength that choose a greater number of promotion strategies will experience less retirement anxiety.

Hypothesis 10.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”).

Hypothesis 10.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”).

The effect of the higher correlations between GRFM strength and promotion strategies will also impact on the levels of positive and negative affect. Individuals that have higher GRFM strength (more promotion focused) and who choose more promotion type strategies should report more positive affect and less negative affect. The same will be true when both GRFM strength and number of promotion strategies chosen are low. The following two hypotheses are designed to capture this proposition.

Hypothesis 11.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **high** (“greater fit”).

Hypothesis 11.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **low** (“greater fit”).

Hypothesis 12.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (“greater fit”).

Hypothesis 12.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (“greater fit”).

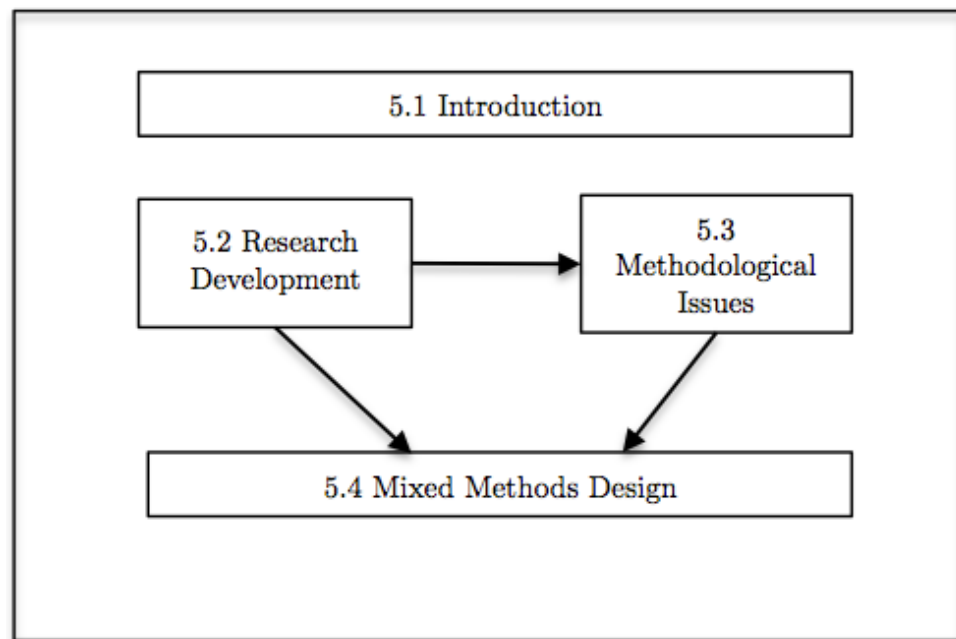
This chapter has outlined the development of the research hypotheses based on the literature review and the aims and objectives of the present thesis. Table 4.1 below summarises the individual hypotheses. The following chapters will detail the individual studies beginning with Chapter 5, which will discuss the approach taken to the overall research design. This is followed by Chapter 6, which details Study 1.

Table 4-1 Summary of Research Hypotheses

Hypothesis	Study Number
1. Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies	2
2. Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies	2
3. General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen.	2
4. Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.	3
5. Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies	3
6. General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen by participants in Study 3.	3
7. GRFM Strength will be negatively associated with pre-retirement anxiety.	
8. GRFM strength will be positively associated with positive affect (PA).	3
9. GRFM strength will be negatively associated with negative affect (NA).	3
10.1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater "fit").	
10.2 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater "fit")..	
11.1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and PA such that the levels of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater "fit").	3
11.2 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and PA such that the levels of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater "fit").	
12. 1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and NA such that the levels of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater "fit").	3
12.2 Type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and NA such that the the levels of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater "fit").	

Chapter 5 Research Design and Philosophy

Figure 5.1 Layout of Chapter 5



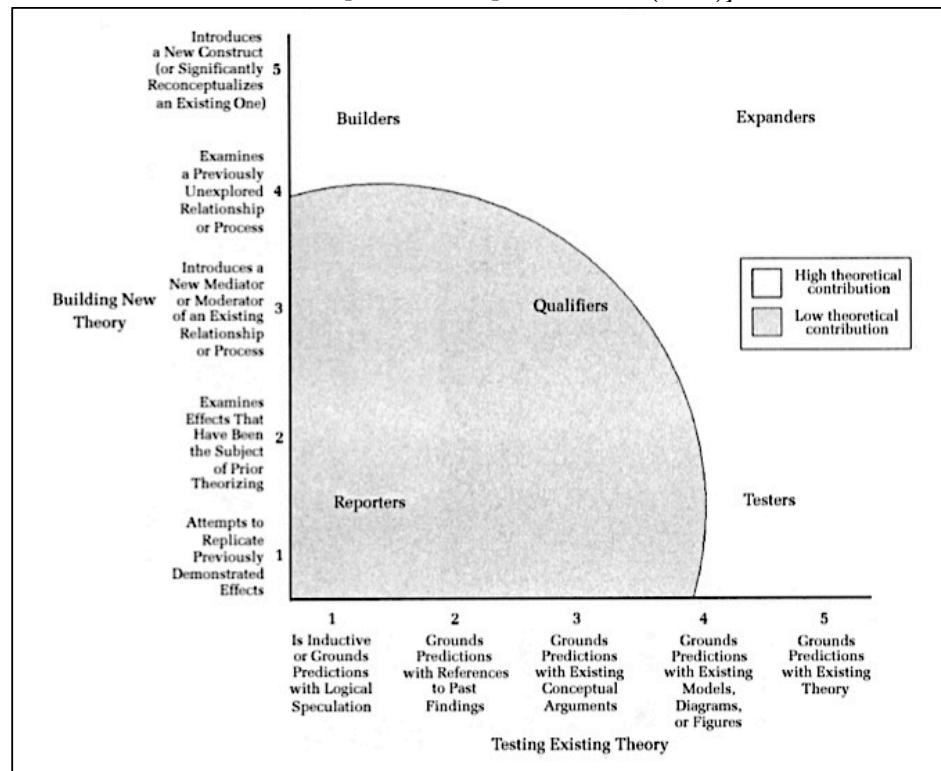
5.1 Introduction

This chapter outlines the approach taken to the design of this research programme. The research comprises of three distinct studies, this chapter will focus on the general approach taken, the methodological issues considered and the philosophical stance that underpins the overall research programme. Details of the design of the individual studies, including sample characteristics, measurement decisions and the nature of the analysis in each study will be given at the beginning of each chapter dedicated to the individual study.

5.2 Research Development

The approach taken in the present study is an attempt to address a gap identified in the current literature on retirement. The aim of the research is to elicit and test a set of pre-retirement preparation strategies that reflect regulatory focus theory (RFT) as described by Higgins et al. (2001) in order to build a deeper understanding of the processes that impact on levels of pre-retirement anxiety and affect. It will also investigate the mediating effect of construal level on these relationships. Colquitt and Zapata-Phelan (2007) state that theory building captures the degree to which empirical research clarifies or supplements existing theory or introduces relationships and constructs that serve as the foundations for new theory. Colquitt and Zapata-Phelan introduced a taxonomy that reflected the theoretical contributions of empirical articles along the dimensions of theory building and theory testing. Their theory building arguments, which are seen on the vertical axis in Fig. 5.2 below, were inspired by Whetten's (1989) discussion of what constitutes a theoretical argument and consist of five points from 1), attempts to replicate previously demonstrated effects to 5), introduces a new construct (or significantly reconceptualises an existing one).

Figure 5.2 Taxonomy of Theoretical Contributions for Empirical Articles [Taken from Colquitt and Zapata-Phelan (2007)]



The research gap identified in the review of the current retirement literature is the lack of a taxonomy that distinguishes retirement preparation strategies according to an individual's chronic promotion or prevention motivational perspective (regulatory focus orientation) (Higgins, 1994, 1997). There is also no research that examines the impact that a fit or non-fit of such strategies may have on pre-retirement anxiety and affect. To address this problem requires an approach that falls between point 3 and 4 on the theory-building axis in Fig. 5.2 The relationship between chronic regulatory orientation and retirement decisions has been explored previously; however, the relationship between chronic regulatory orientation and pre-retirement anxiety and affect has not. This aligns to point 4 on the vertical axis of the framework "examines a previously unexplored relationship or process". However, the present research also introduces a new moderator of this relationship, namely the strategies (promotion approach or prevention avoidance type) chosen to prepare for

retirement, which fits within point 3 on the vertical axis of Colquitt and Zapata-Phelan's theory building axis.

In response to the gap identified in the literature, this research offers us an opportunity to gain a deeper understanding of the processes underlying "how" individuals implement retirement preparation strategies. Study 1 employed a qualitative approach and set out to test if a cross section of individuals would propose promotion type strategies when the questions asked are primed as promotion focused and propose prevention type strategies when the questions asked are prevention focused. First, the criteria for developing a taxonomy of retirement preparation strategies was identified from a review of the current literature. Using a supraliminal priming technique, respondents were asked to identify preferred retirement strategies in an open-ended questionnaire based on five specific factors that forms the taxonomy developed. A rigorous process of analysis and confirmation was employed in order to arrive at the final set of strategies.

The second aspect of research development involves theory testing. This is also captured in Colquitt and Zapata-Phelan's taxonomy. This time the horizontal axis outlines five points that range from a low theoretical contribution (1. Is inductive or grounds predictions with logical speculation) to a high theoretical contribution (2. Grounds predictions with existing theory). Study 2, in the present research programme seeks to test the propositions that chronic promotion oriented individuals will prefer promotion type strategies compared to chronic prevention oriented individuals who will prefer prevention type strategies made in the development of the instrument in Study 1. Study 2 attempts to provide a moderate level of theory testing by explaining the relationship between the strategies developed in Study 1 with reference to the predictions made by regulatory focus theory (Higgins, 1994, 1997). This maps onto point 3 on Colquitt and Zapata-Phelan's horizontal axis.

Finally, Study 3 is a comprehensive test of the proposed relationships set out in the earlier chapters. Namely to reconfirm the propositions tested in Study 2 and also the proposition that the type of strategies chosen will moderate the relationship between chronic regulatory orientation and pre-retirement anxiety and positive and negative affect. Study 3 maps onto point 4 on Colquitt and Zapata-Phelan's horizontal axis in that it involves grounding the propositions examined with existing models by the use of diagrams and figures to delineate the relationships between the variables. These relationships are then explained by demonstrating the logical and interconnecting arguments from the theoretical underpinnings of regulatory focus and regulatory fit theory. This approach can be considered appropriate to point 5 on Colquitt and Zapata-Phelan's horizontal axis. Within Colquitt and Zapata-Phelan's definition the overall approach outlined above can be regarded as a high theoretical contribution.

5.3 Methodological issues

To maximise the construct and predictive validity of this research the research programme was designed to be conducted in 'the field' using samples that were full-time employed. Inherent in this type of field research are a number of issues of concern to all researchers who adopt this approach. Field research carries with it some inherent challenges such as the researcher managing complex relationships, constraints on sample availability, the timing of the research and changes to the research design midway through the project (Edmondson & McManus, 2007).

Context is an important element of research design (Johns, 2001; 2006). Johns defines context as "situational opportunities and constraints that affect

the occurrence and meaning of organizational behaviour as well as functional relationships between variables” (2006, pp.386). In practical terms this means that, in addition to the general characteristics of an organisation and demographics of samples, this research considers issues of access and the practical costs and benefits of carrying out the research to inform the decisions taken. Buchanan & Bryman, (2009) suggest contextual issues must be accommodated in method selection decisions. They also argue that ‘choice of method is shaped not only by research aims, norms of practice, and epistemological concerns, but also by a combination of organisational, historical, political, ethical, evidential and personally significant characteristics of the field of research” (2009, pp. 1).

One suggestion that has been proposed for overcoming the problem of choosing the correct method to suit the context is to look at the internal consistency among elements of a research project, including the research question, prior work, research design, and theoretical contribution (Edmondson & McManus, 2007). Their framework of methodological fit is utilised in this research thesis, which involves a process of iteration between inductive theory development and deductive theory testing to advance our knowledge of retirement planning. In their framework Edmondson and McManus, (2007) suggest that the journey may involve many iterative cycles between stages and that only through the learning process will methodological fit be achieved.

To account for the issues outlined in the previous two paragraphs the present research was designed to take into account the importance of methodological fit. Because of its nature the state of prior research was fundamental to the establishment of the research questions. The changing nature of the retirement landscape was established in the review of the literature in the field. The influence this has had on the current research carried out was also established. While this created a relatively new approach to the

research into the retirement process it was also noted that well established theories of self-regulatory focus were not being applied to any great extent. Edmondson & McManus, (2007) propose that it is legitimate to develop intermediate theory research which draws from prior work, often applying constructs that sit within a mature stream of research in order to challenge or modify prior work. Using these bodies of literature, to propose new constructs and/or provisional theoretical relationships. Edmondson & McManus, (2007) also distinguish between nascent, intermediate and mature theory and the appropriate methodological approaches for them. In brief nascent theory is concerned with opened inquiry about a phenomenon of interest and utilises qualitative open-ended data. Mature theory is concerned with focused questions and/or hypotheses relating existing constructs and utilises quantitative data. Intermediate theory is concerned with proposed relationships between new and established constructs and adopts a hybrid approach to data utilising both qualitative and quantitative data.

This research programme is concerned with applying existing constructs, (regulatory focus theory) to a new area (retirement planning behaviours) but also establishing through a set of focused hypotheses the implications of this new approach. The research designs in this context suggest that mixed-methods are most appropriate and offer the strongest insights into the research question.

5.4 Mixed Methods Design

Mixed Methods was identified as the most appropriate approach for this research programme. The research programme is carried out over three studies and the individual approach to each study is detailed in each relevant chapter below (Study 1 Chapter 6, Study 2 Chapter 7 and Study 3 Chapter 8). This

section will give an overview of the mixed methods approach and how it is applied in the overall research programme. Johnson, Onwuegbuzie & Turner, 2007 suggests that mixed methods research is considered the third methodological approach after qualitative and quantitative approaches. Johnson et al (2007) identified, compared and contrasted 19 different definitions of mixed methods extracting two overall definitions, one general and one, which refers to mixed methods as a type of research.

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. (2007, pp. 123)

A mixed methods study would involve mixing within a single study; a mixed method program would involve mixing within a program of research and the mixing might occur across a closely related set of studies. (2007, pp. 123)

My review of the current literature in the field of retirement planning reveals that there is a dearth of research employing the mixed methods approach. Similarly, there are only a limited number of studies employing mixed methods in relation to retirement decisions (see Shacjklock & Brunetto, 2005; Proper et al., 2009 for examples). Reviews of methodological research approaches suggest that there is a greater need to employ mixed method approaches to reconcile the seemingly contradictory demands of theory development and the application of rigorous research techniques (Srnrka & Koeszegi, 2007). In A Tale of Two Cultures, Gary Goertz and James Mahoney (2012) argue that qualitative and quantitative methods constitute different

cultures, each internally coherent yet marked by contrasting norms, practices, and toolkits. They seek to promote toleration, exchange, and learning by aiming to enable scholars to think beyond their own culture and see an alternative scientific worldview.

The present research adapts a research design referred to as a sequential two-study design. In new or underdeveloped areas of research, it is common to apply qualitative methods in a preliminary stage, thus, enabling the researcher to develop a conceptual framework, to generate hypotheses, or to establish the necessary tools (particularly instruments for measurement) for the quantitative study (Lilford and Braunholtz, 2003; de Ruyter and Scholl, 1998; Morgan and Smircich, 1980, in Srnka & Koeszegi, 2007). Creswell (2003) suggests the method chosen by the researcher should consider the match between the problem and the approach. This sequential approach was adopted, as the initial stage of the research required the establishment of a new set of retirement strategies proposed by the specific perspective chosen. This set of strategies was then utilised for further exploration of the research questions developed.

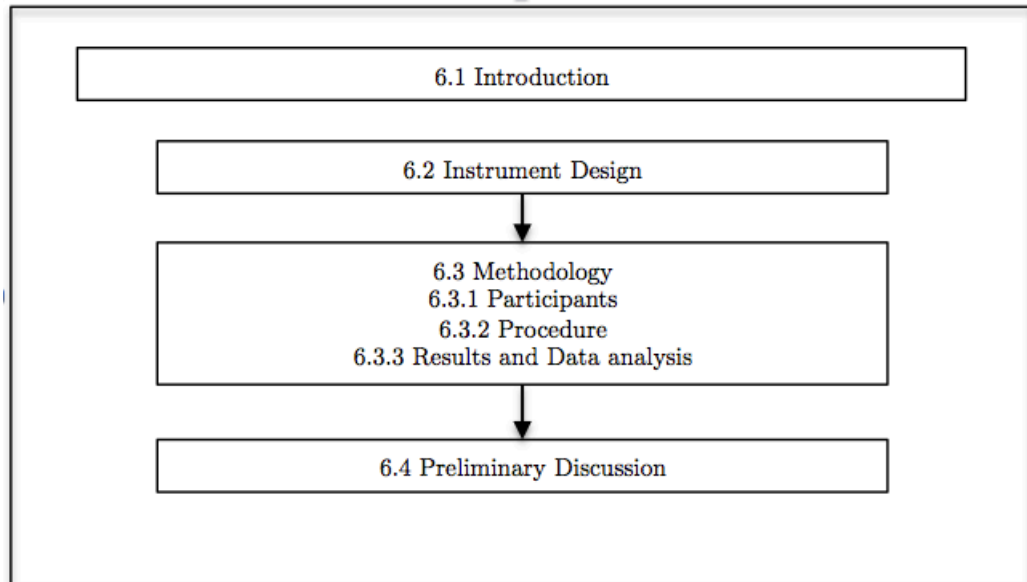
The decision to use qualitative data initially was determined by the appropriateness of the method to the variables being studied. This formed the basis upon which the first research question was explored. Study 1 addresses the proposition that, by applying regulatory focus theory (Higgins, 1997), it should be possible to establish retirement preparation strategies that are representative of either a promotion focus or a prevention focus. The approach adopted was qualitative in nature and constituted the first part of the sequential two-study approach. The research question established whether individuals would propose promotion type strategies when the questions asked are primed as promotion focused and propose prevention type strategies when the questions asked are prevention focused?

The second part of the sequence in the mixed methods design again looked at the appropriateness of the method to the variables being studied, the overall aims of the research, and the availability of valid and reliable methods in past research. This determined the use of quantitative data in the second study. Establishing a new set of promotion and prevention retirement preparation strategies was the main aim of Study 1. These were created in order to test the proposition that the type of strategies chosen would impact on the relationship between chronic regulatory orientation and pre-retirement anxiety and affect. As these variables were all measured using likert scales it was deemed appropriate that quantitative approaches were considered for the testing to this new set of strategies. The second research question sought to establish whether chronic promotion orientated individuals would prefer the promotion focused strategies and whether chronic prevention orientated individuals would prefer the prevention type strategies identified in Study 1.

Chapter 8 and its subsections were designed to answer the final question of what factors impact on the relationship between chronic regulatory orientation and the current feelings experienced by individuals that are approaching retirement? This chapter required a very detailed consideration of the appropriateness of the method to the variables being studied. This was considered in light of a conceptual model, the predicted relationships, the context and the overall aim of the present research. Individual hypotheses were established and each were given due consideration in their own right. Full details of the research design, the hypotheses being tested, the measures used and the methods employed are detailed in Chapter 8.

Chapter 6 Study 1

Figure 6.1 Layout of Chapter 6



6.1 Introduction

The first study in this research programme is designed to address the gap in the current literature with regards to the non-existence of a taxonomy of approach and avoidance retirement preparation strategies. As discussed earlier, previous research has identified several models of retirement planning and preparation. These have contended that retirement planning can be thought of as having process and outcome components (Adams & Rau, 2011). Self-regulation is regarded as being an essential aspect of monitoring ones progress towards the goal of retiring. However self-regulation does not take place in a vacuum. Broader variables influence the way individuals self-regulate and in terms of retirement preparation these variables include the work environment, social environment, economic environment, and social security system in existence. Research outlined previously also suggests that individuals

that are replacing work by retirement need to take into account that work fulfils basic needs that will no longer be available to them from the work environment. These include financial, personal, social and generative needs (Barak, 1995). Individual differences also influence the amount of planning for retirement that individuals engage in. Poor health, for example, restricts retirement planning (Kim and Feldman, 2000).

The overall research programme is interested in how individuals prepare for retirement while taking cognisance of the factors involved in the process of planning for retirement. While previous studies have explored preparation strategies, they have not taken into account the difference between individuals who are chronically promotion or prevention focused. Study 1 is an exploratory study and is designed to test if in fact there are differences in the type of strategies that individuals would choose depending on their regulatory orientation. In Studies 2 and 3, the tendency for chronically promotion-oriented individuals to pursue promotion focused goals and chronically prevention-oriented individuals to pursue prevention focused goals is explored. Promotion goals are concerned with achieving hopes, wishes, and aspirations, and are thus likely to involve an approach strategy. One that involves approaching a gain or avoiding a non-gain. Prevention goals on the other hand involve an avoidance strategy designed to cautiously avoid a loss or approach a non-loss (Higgins et al., 2001). Study 3 explores the moderating effect of a fit between regulatory orientation and the type of strategy preferred. In order to achieve the aims of Study 2 and 3 this first study is designed to elicit a number of promotion and prevention focused strategies.

6.2 Instrument Design

Study 1 employed a qualitative design to elicit a taxonomy of approach and avoidance retirement strategies. An online survey was designed, which utilised a supraliminal semantic word priming technique (Bargh & Chartrand, 2000; Higgins & Chaires, 1980) to create two separate opened-ended questionnaires. Semantic priming works by activating semantic networks in an individual's cognition. Semantic networks are networks of words and concepts built in the brain through prior experience (Martin and Chao, 2001 in Bartlet et al., 2013)). Research has shown that accessing semantic networks through words can activate abstract concepts and categories that ultimately affect behaviour (Bargh et al., 2001). The first version of the survey was designed to elicit eager approach type strategies and the second version was designed to elicit vigilant avoidance type strategies. Supraliminal priming allows the participant conscious attention of the priming stimulus. However, they are not aware of the intended consequence of the prime on their subsequent behaviour (Bargh & Chartrand, 1997). Compared to subliminal priming, where stimuli are presented below the perceptual threshold, supraliminal priming produce stronger effects (Higgins & King, 1981; Bargh & Chartrand, 1997; Bartlet et al., 2013). Details of the semantic primes used in the current study are described in more detail in section 6.3.2 below.

The approach taken to guide the design of the questionnaire was a mix of both inductive and deductive content analysis. Conventional qualitative content analysis involves a degree of involvement of inductive reasoning, in which coding categories are derived directly and inductively from the raw data. Directed content analysis, on the other hand, involves initial coding starting with a theory or relevant research findings. Then, during data analysis, the researchers immerse themselves in the data and allow themes to emerge from

the data (Hsieh and Shannon, 2005). As discussed in Chapter 1 there are a number of issues and theories that influence retirement decisions. These issues and theories were used to form a directed content analysis approach to the design of the questionnaire. These include influences such as the financial position experienced by individuals (Beehr and Glazer, 2000), their health status (Beehr and Glazer, 2000; Topa et al., 2009;) and employment activities (Beehr and Glazer, 2000; Stephens & Feldman, 1997; Gobeski & Beehr, 2009; Wang, Zhan, Liu, & Shultz, 2008). Commitment to leisure activities has also been shown to significantly predict retirement intentions (Schmidt and Lee, 2008; Beehr and Glazer, 2000). These were also the prominent themes that emerged from the review of the retirement adjustment and satisfaction literature (Quinn et al., 1990; Taylor & Shore, 1995; Wong & Earl, 2009). As well as engaging in bridge employment, volunteer work was also shown to have a positive effect on retirement adjustment (Kim & Feldman, 2000; Wang, 2007; Zhan et al., 2009; Dorfman & Douglas, 2005).

Previous instruments designed to assess retirement satisfaction included most of the factors described above. The “Retirement Descriptive Index” (RDI), for example, developed by Smith et al. (1969) contained a number of subscales (e.g., Financial, Work and Activities). Another, the “Retirement Satisfaction Inventory” (RSI), (Floyd, Haynes, Doll, Winemiller, Lemsy, Burgy, & Heilman, 1992) contained items to assess both current retirement satisfaction and perceptions of retirement-related experience predictive of adjustment and well-being in later life (Fonseca, 2007). Other instruments included Leung and Earl’s (2012) “Retirement Resources Inventory” (RRI), which was designed to examine retirement resources and the “Retirement Expectations Inventory” (REI) designed to examine expectations for retirement, their relationship with gender, current work attitudes, and current leisure experiences (Gee & Baillie, 1999).

Based on the review carried out in Chapter 2 a number of factors were identified to form the basis of an open ended questionnaire. These were health, finances, activity, contribution to community and working in retirement. This is the deductive element of the approach. However, the approach also included a supraliminal priming technique in order to separate the questionnaire into two conditions, namely promotion eager approach and prevention vigilant avoidance. The subject of the main study is the different strategic inclinations that a chronic promotion or prevention regulatory focus influences and the impact of a fit or non-fit between the type of strategies chosen and their chronic focus. Study 1 sought to distinguish the retirement preparation strategies into both promotion eager approach and prevention vigilant avoidance type. As discussed in Chapter 3, an eager strategy sustains a promotion focus (fit), whereas it disrupts a prevention focus (non-fit). A vigilant strategy sustains a prevention focus (fit), whereas it disrupts a promotion focus (non-fit). Given these differences in what creates fit and non-fit, one would expect that individuals with a promotion focus would prefer to use eager (rather than vigilant) strategies to pursue their goals, and individuals with a prevention focus would prefer to use vigilant (rather than eager) strategies (Higgins, 1997, 2000; Higgins & Spiegel, 2004).

The final instrument contained two versions. Both versions consisted of five areas or factors as described above. Five opened ended questions were designed to capture individual's strategies regarding each factor. These questions contained a semantic prime, one type of prime for promotion approach and another for prevention avoidance. For example, the question designed to capture health in version one (Promotion) was "Imagine you are the type of person that believes it is important to **have** good health in your retirement. What would your strategy be to achieve this goal?" Borrowing from a method originally used by Higgins et al. (1994) the same question in version

two, designed to capture prevention strategies, was “Imagine you are the type of person that believes it is important to **avoid** bad health in your retirement. What would your strategy be to achieve this goal?” The full instrument can be seen in Appendix 4.

6.3 Methodology

The first step in conducting this research involved obtaining ethical approval for the study and negotiating access with the target organisation. Ethical approval to begin data collection was sought from the Dublin City University Research Ethics Committee. The letter of approval can be seen in Appendix 1.

6.3.1 Participants

The participants for study one were all employees of a large public sector organisation, circa 1800 employees. Permission was sought from the Director General of the organisation to facilitate the circulation of an email inviting the staff to participate via the internal email distribution list. Permission was granted via email, a copy of which can be seen in Appendix 2. The staff compliment was distributed nationally in both large and small urban locations. The potential population of male and female employees varied in age from 18 years to 64 (employees in this organisation ‘must’ retire on reaching their 65th birthday). Asking participants to indicate the organisational grade at which they were employed captured information regarding remuneration. The grade system is structured and individuals are paid based on their grade. 433 or approximately 24% of individuals participated in the survey. See Table 6.1 for details.

6.3.2 Procedure

Once the instrument was designed it was presented on “Survey Monkey”. On receipt of permission from the Director General of the organisation, an email inviting all staff of the organisation to participate was circulated via the internal email distribution list for all staff. The email (see Appendix 3) explained the reason for the survey and assured anonymity for the participants. It also explained that there were different versions of the survey and in order to randomly assign individuals to either version one or two of the survey (promotion or prevention prime) the email contained a list of colours. The participant was instructed to choose a colour based on how closely it matched their favourite colour. There were six colours three of which were a link to version one (promotion) and three of which were a link to version two (prevention) of the survey.

Table 6-1 Demographics for Study 1 Participants

	Totals	Version 1 Promotion	Version 2 Prevention
Gender			
Male	155	102	53
Female	278	155	123
Age Bracket			
18-30 Years	17	7	10
31-40 Years	90	48	42
41-50 Years	152	84	68
51-60 Years	158	105	53
61-70 Years	21	15	6
Grade			
Grade 13	3	3	0
Grade 12	0	0	0
Grade 11	120	63	57
Grade 10	31	18	13
Grade 9	25	19	6
Grade 8	152	95	57
Career Grade	48	27	21
Grade 7	34	21	13
Grade 6	24	15	9
Grade 5	0	0	0
Grade 4	5	2	3

Note: Grade 4 Represents the highest paid grade and 13 the lowest

The survey itself contained a total of nine questions. Question one was a consent question and questions two to four were demographic questions including gender, age bracket and grade. The balance of the questionnaire contained the open-ended questions designed to capture strategies for health, finances, activity, contribution to community and working in retirement. The survey contained two versions. Both versions consisted of five opened ended questions, which were designed to capture individual's strategies regarding each factor. For example, the question designed to capture health in version one (Promotion) was "Imagine you are the type of person that believes it is important to have good health in your retirement. What would your strategy be to achieve this goal?" Borrowing from a method originally used by Higgins et al (1994) the same question in version two, designed to capture prevention strategies, was "Imagine you are the type of person that believes it is important to avoid bad health in your retirement. What would your strategy be to achieve this goal?" Figure 6.2 below shows how the question appears online. The full instrument can be seen in Appendix 4.

Figure 6.2 Example of Questions as they appear on Survey Monkey

As people plan for retirement they may think about certain strategies that will help them prepare for it. Strategies are the long term plans for achieving one's goals. The following questions are hypothetical. Please answer all questions in this section.

5. Imagine you are the type of person that believes it is important to have good health in your retirement. What would your strategy be to achieve this goal?

6. Imagine you are the type of person that believes it is important to be in a good financial position when you retire. What would your strategy be to meet this goal?

Once the participants reached the end of the survey, they saw a final screen thanking them for their participation and explaining briefly the purpose of the study. It also gave my contact information should anyone require any further information regarding the research. The survey was left open for four weeks. Once the four weeks had passed the survey was closed and the data exported to a computer for analysis.

6.3.3 Results and Data Analysis

Four hundred and thirty three individuals participated in the open ended questionnaire, which represents approximately 24% of the target organisation. The demographics of the respondents are described in the Table 6.1 above. Each factor generated a large number of responses.

Given that there was a large response and therefore a large amount of data collected, it was decided that a qualitative analysis tool was required to assist in the analysis. Computer aided qualitative data analysis software (CAQDAS) programmes take qualitative data further than possible compared to manual data analysis (Bazeley, 2006, 2007; Fielding and Lee, 1998; Kelle, 1996; Tesch, 1990; Weitzman and Miles, 1995 in Leech and Onwuegbuzie, 2011). NVIVO is the CAQDAS programme selected for this study on the basis that it suited the data type and was considered appropriate for the task involved. NVIVO is one of the most widely used CAQDAS programmes, with as many as 400,000 users in more than 150 countries (QSR International Pty Ltd, 2009) (Leech and Onwuegbuzie, 2011). It was used in combination with manual techniques. Previous research has shown that a combination of both manual and computer assisted methods are likely to achieve the best results (Welsh, 2002).

The respondents' self-authored strategies were exported to NVIVO and a process of inductive content analysis was initiated. For each question, an initial data reduction process was implemented. This required the removal of responses

that contained irrelevant content or remarks. One-word responses like the words “diet” or “exercise”, while implicit, were removed as they did not indicate a clear direction or behavioural pattern and would require subjective interpretation to move them to that position. The purpose of the questions was to elicit clear strategies.

A word frequency analysis was used to create a number of categories for each question. On average, the top six most frequently occurring words in the responses received, having removed the one-word responses, were used to identify the categories. In the example below, the most frequently occurring word was exercise. So category 1 for question 1 is exercise. Table 6.2 is an example of the six words that occurred most frequently in the strategies proposed by respondents to question 1 on health.

Table 6-2 Word frequency results for question one on health

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Exercise 74%	Exercise 73%	Diet 57%?	Diet 57%	Medical health insurance 27%	Medical health insurance 24%

Category 4		Category 5		Category 6	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Habits/hobbies 12%	Habits/hobbies 10%	Drink/smoke /alcohol 10%	Drink/smoke/ alcohol 8%	Stress 9%	Stress 7%

Results given as percentage of respondents for particular condition that included the words in their responses
N = 180 for Avoid Condition & 247 for Approach Condition.

Exercise appeared in 73% of the approach responses and 73% of the avoidance responses. The next most frequent word or item was diet, appearing in 57% of both response sets. This process was repeated for each question and responses were coded for each category. The coding convention used was

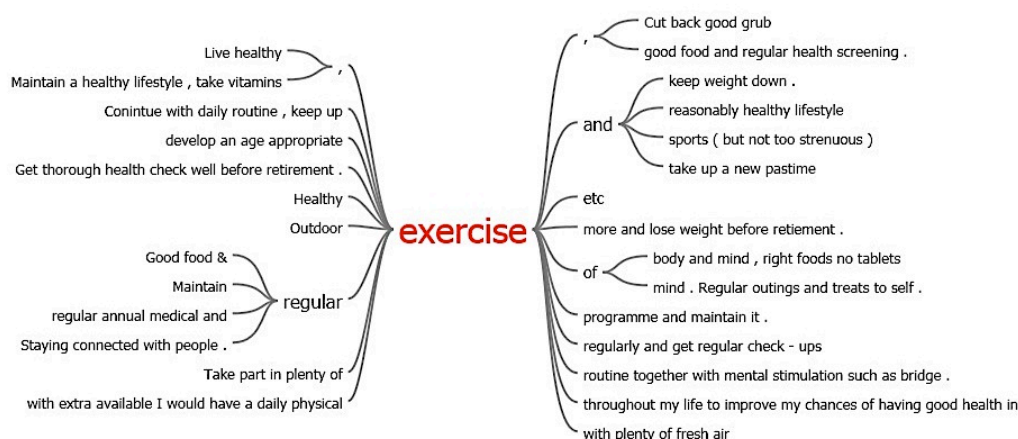
Question Number, Category Number, approach/avoid. The category number refers to the order of the most frequent words. For example, in Question 1, which is the question regarding health, category 1 refers to the most frequent word (exercise in this case) and category 2 refers to the next most frequent word (diet in this case). Frequency percentages for the other questions are given in Appendix 9. A separate spreadsheet was created in Microsoft Excel containing actual responses so each question, category and wording was displayed side by side for comparison.

Once these were saved as a set, NVIVO allows you to see these words in context and create word trees to compare the uses of the words and phrases. An example of the two word trees (approach and avoidance) for the topic health can be seen in figures 6.3 and 6.4 below. Further examples are available in Appendix 5. A further coding exercise was then carried out with the significant strategies contained in the word trees. Close examination of these sentences and phrases revealed the existence of a number of themes. Where they contained positive/negative words or phrases, implied possible gains/losses, non-gains/non-losses, or implied proactive/cautious actions they were coded as approach/avoidance as appropriate. This exercise allowed a set of initial strategies to be created.

Figure 6.3 Word Tree for Q5 Health Category 1 "exercise" prevention type



Figure 6.4 Word Tree for Q5 Health Category 1 "exercise" promotion type



These initial strategies formed the basis of a discussion with two experienced research scholars at DCU and using a methodology employed by Higgins et al. (1994) one or more sentences that best captured the emergent themes were written for each topic. The participant's original words were used to the greatest extent possible. For each topic four sentences were created, two promotion eager approach type and two prevention vigilant avoidance type. An example of an approach response for good health was "Participate in some form of exercise to increase fitness". An example of an avoidance response for the same topic was "Have regular medical check-up's to avoid any medical issues."

Three independent Subject Matter Experts (SMEs) were then presented with the twenty strategies, in random order, and were asked to identify those which reflected an eager approach (promotion) orientation and those which reflecting a vigilant avoidance (prevention) orientation. The SMEs were supplied with a definition for the Eager Approach type strategy, (reflective of proactively ensuring the attainment of positive outcomes), and a Vigilant Avoidance definition (being cautious, and avoiding negative outcomes or

potential losses). The SMEs were asked to place the number one in the box beside the strategy for the Eager Approach type strategy and the number two in the box for the Vigilant Avoidance type strategy. Each SME was given the strategies in a different random order. A full copy of the inter-rater instructions can be seen in Appendix 6.

The results from each Subject Matter Expert (see Appendix 7) were collated and subjected to a Generalised Kappa Statistic for multiple raters (Fleiss, 1981). The computer model employed to calculate the Kappa Statistic was King and Judd (2009) for excel. Output for this calculation can be seen in Appendix 8. The Kappa Statistic was first proposed by Cohen (1960). There have been a number of variants of Kappa (Scott, 1955; Maxwell and Pilliner, 1968 for example). All have various interpretations of intraclass correlation coefficients, which are a widely used measure of inter-rater reliability for the case of quantitative ratings (Fleiss, Levin, & Paik, 2003). Landis and Koch (1977a) have characterised different ranges of values for Kappa with respect to the degree of agreement they suggest. For most purposes, values greater than 0.75 or so may be taken to represent excellent agreement. According to Fleiss (1981) <.2 is a poor agreement; .21-.4 fair; .41-.6 moderate; .61-.8 strong; .8 near complete agreement. Achieving a Generalised Kappa of 0.799 the results indicated an almost complete agreement. A discussion with another Subject Matter Expert resolved the minor divergences and the final set of strategies can be seen in Table 6.3.

Table 6-3 Final Strategies

	Answer Type	
	Eager Approach type strategy, which is reflective of proactively ensuring the attainment of positive outcomes.	Vigilant Avoidance type strategy, which is reflective of being cautious and avoiding negative outcomes or potential losses.
Question:		
Finance	Plan ahead and try to maximise my savings.	Don't take on additional debts. Pay off existing loans.
	Save money or possibly invest to fund a better lifestyle.	Err with caution and put some money aside.
Health	Continue with or develop a healthy diet now.	Ensure to have adequate medical insurance.
	Participate in some form of exercise to increase fitness.	Have regular medical check-ups to avoid any medical problems.
Working	Explore continuing similar work to my current career or retrain to do something else	Avail of training early to prevent my skills becoming out of date
	Attend a course of training. Keep up with technology in order to work from home	Look for part-time work in a niche area to avoid money shortages in retirement
Active	Plan a structured day. Utilise time to achieve goals like gardening or reading	Will have to develop a hobby in case I get bored with current activities.
	Develop skills and have plenty of hobbies, which can be continued or taken up.	Will have to look for a part-time job in order to supplement income
Community	Learn new skills so as to offer my services in a positive way for some community group	Build up involvement with a group slowly. Don't become over involved as may be difficult to step back
	Actively research and identify a group to see if my involvement would improve their current situation	Remain active in existing club/association as it is easier to continue if already involved

6.4 Preliminary Discussion

Study 1 adopted a deductive approach to elicit retirement strategies from the participants surveyed. Based on Hsieh and Shannon (2005) a “summative content analysis”, which begins with counting of words or manifest content, the analysis here was extended to include latent meanings and themes. Based on the review carried out in Chapter 2 the factors identified to form the basis of the opened ended questionnaire were health, finances, activity, contribution to community and working in retirement. The approach also included a priming technique in order to separate the questionnaire into two conditions, namely promotion and prevention. The aim was to elicit either “Eager Approach” or “Vigilant Avoidance” strategies (Higgins, 1997,2000; Higgins & Spiegel, 2004). The inductive content analysis resulted in a number of strategies being identified as being either positively framed, for example “Get plenty of exercise throughout my life and eat well” or negatively framed, for example “Firstly have a full medical examination in order to see if there are any potential issues. Exercise regularly”. This is consistent with Higgins (1994) proposal that ideal self-regulation involves a positive outcome focus and that ought self-regulation involves a negative outcome focus.

While past research has used measures of retirement satisfaction (Smith et al., 1969; Floyd et al., 1992; Leung & Earl, 2012) there is very little research that has produced retirement preparation strategies in any detail (for possible exceptions see Petkoska and Earl, 2009 and Lee and Law, 2004). To the authors knowledge there is no research to date that has produced retirement preparation strategies that are framed as promotion or prevention type.

Message framing research has suggested that promotion and prevention focused messages can be presented in either a positive or a negative frame, also

known as gain versus loss frame (Lee and Aaker 2004; Levin, Schneider, and Gaeth 1998; Rothman and Salovey 1997). A positive message frame emphasises the positive (i.e., favourable) behavioural outcomes of complying with the message advocacy, whereas a negative message frame emphasises the negative (i.e., unfavourable) behavioural outcomes of non-compliance (Zhao & Pechmann, 2007). Two conceptual frameworks developed to explain message framing are Rothman and Salovey's (1997) framework and Levin et al.'s (1988) framework.

In Rothman and Salovey's (1997) framework, two key dimensions to consider are type of outcome (desirable versus undesirable) and the action (not attain versus attain), which leads to two gain and two loss frames. In Levin, et al.'s (1998) framework, the two key dimensions are the behaviour (x versus not x) and what they call the "frame" (approach versus avoid), which leads to four consequences, two of which involve gains and two of which involve losses (Zhao & Pechmann, 2007). In the light of regulatory focus theory, the two desirable outcomes in Rothman and Salovey's (1997) framework and the two consequences involving gains in Levin et al.'s (1998) framework are promotion focused, whereas the two undesirable outcomes in Rothman and Salovey's framework and the two consequence involving losses in Levin, et al.'s framework are prevention focused. Zhao & Pechmann, (2007) suggest that these, two seemingly different frameworks can be united through regulatory focus theory. The goal of this research was to categorise the strategies developed according to regulatory focus theory.

Looking at the outcomes strategies by category in detail the final strategies developed for the category of preparing for financial security were;

1. *Save money or possibly invest to fund a better lifestyle.*
2. *Plan ahead and try to maximise my savings.*
3. Don't take on additional debts. Pay off existing loans.
4. Err with caution and put some money aside.

Strategies one and two (in italics above) were deemed to be approach type strategies. Promotion goals are concerned with achieving hopes, wishes, and aspirations, and are thus likely to involve an approach strategy. One that involves approaching a gain or avoiding a non-gain (Higgins et al., 2001). The first two strategies above imply an approach focus. Lockwood and Kunda suggest that goal pursuit involves either a focus on achieving success, approach strategy, or preventing failure, avoidance strategy. Strategies three and four above imply a cautious approach to future finances and therefore represent a prevention type avoidance strategy, with a focus on preventing a loss (Higgins et al., 2001). In the current literature goals for preparing for financial security in retirement have been developed. However, they have not been segregated into this type of approach and avoidance type taxonomy. Petkoska and Earl (2009) for example developed a retirement planning questionnaire. It contained seven items categorised as Financial/General. Items included "Bought stocks, funds, or bonds for long term investment" and "Made contributions to a superannuation fund".

Similarly the strategies developed for the category of preparing for health in retirement can be seen as approach type or avoidance type.

1. *Continue with or develop a healthy diet now.*
2. *Participate in some form of exercise to increase fitness.*
3. Have regular medical check-ups to avoid any medical problems.
4. Ensure to have adequate medical insurance.

Developing a healthy diet and taking part in exercise to increase fitness are clearly positive strategies that indicate a desire to achieve a gain. Whereas three and four can be considered avoidance strategies designed to prevent failure or avoid a loss. Health items from the retirement planning questionnaire (Petkoska & Earl, 2009) included “Exercise regularly (at least twice a week)” and “Arranged a medical check-up periodically (at least once every two years)”. Again these items are more neutral and could not be classified as either approach or avoidance.

Strategies developed for the category of preparing for contributing to your community in retirement can be seen as approach type or avoidance type.

1. *Learn new skills so as to offer my services in a positive way for some community group.*
2. *Actively research and identify a group to see if my involvement would improve their current situation.*
3. Remain active in existing club/association as it is easier to continue if already involved.
4. Build up involvement with a group slowly. Don't become over involved as may be difficult to step back.

Strategies one and two contain words such as ‘positive’ and “improve”. These imbue a sense of positive approach whereas strategies three and four imbue caution and avoidance with the words “easier to continue” and “difficult to step back”. The retirement questionnaire (2009) captured this category under “Interpersonal/leisure” with items like “joined/made enquires about joining a social club or group” and “joined/made enquires about joining a club, team or class related to current or future leisure activity”.

Strategies developed for the category of preparing to stay active in retirement can also be categorised as approach type, for example 1 and 2 or avoidance type, see 3 and 4 below:

1. *Plan a structured day. Utilise time to achieve goals like gardening or reading.*
2. *Develop skills and have plenty of hobbies, which can be continued or taken up.*
3. Will have to look for a part-time job in order to supplement income.
4. Will have to develop a hobby in case I get bored with current activities.

Strategies one and two in this category are about achieving goals and developing skills compared to three and four, which are about avoiding income loss and avoiding boredom. Items again from the retirement planning questionnaire were under the “interpersonal/leisure” category and were mainly concerned with staying in touch with friends and family and leisure activity in general. For example “visited friends and family regularly” and continued current leisure activity/travel or started new leisure activity/travel”.

Strategies developed for the category of preparing to continue some class of work in retirement can also be categorised in the same manner as above.

1. *Attend a course of training. Keep up with technology in order to work from home.*
2. *Explore continuing similar work to my current career or retrain to do something else.*
3. Look for part-time work in a niche area to avoid money shortages in retirement.
4. Avail of training early to prevent my skills becoming out of date.

Again one and two are about achieving something, working from home and retraining to do something else. Three and four however are about avoiding money shortages and skills becoming out of date. Work did feature as a category in the RPQ. “Watched/listened to shows and post-retirement work” for example.

The creation of these strategies is stage one of the current research. While stage two will attempt to validate the strategies in relation to

individual's chronic regulatory focus the final study will test the impact these strategies combined with chronic regulatory focus has on individuals pre-retirement anxiety and sense of well-being. Higgins' (2000) theory of regulatory fit proposes that motivational strength will be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation.

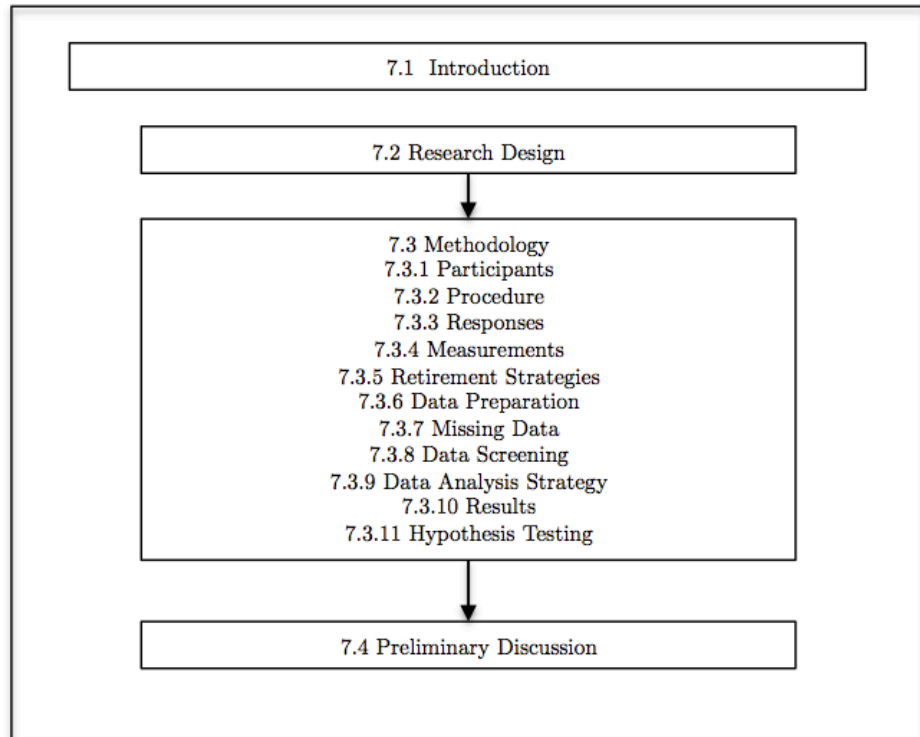
Cesario et al. (2004) and Lee and Aaker (2004) provided the first demonstrations that regulatory fit theory could be used to increase the effectiveness of a persuasive appeal. Speiggl et al. (2004) demonstrated that fit between regulatory focus and strategic outcome framing influences the effectiveness of health messages in changing behaviour. The author contends that strategies framed as promotion approach such as "Save money or possibly invest to fund a better lifestyle" will be more likely to reduce anxiety about retirement and feelings of negative well-being for promotion oriented individuals than those framed as prevention avoidance such as "Err with caution and put some money aside".

Regulatory fit theory contends the same to be true of prevention avoidance framed messages (For example: Have regular medical check-up's to avoid any medical problems) and chronic prevention oriented individuals. This strategic approach matches the individual's orientation and therefore should also reduce the feelings of anxiety and negative well-being.

This initial study is the first step in addressing that gap in the literature and Study 2 of the research programme tests these strategies by presenting them to individuals and comparing their chronic regulatory focus to the number of promotion and prevention strategies chosen. The next chapter describes this study.

Chapter 7 Study 2

Figure 7.1 Layout of Chapter 7



7.1 Introduction

The aim of Study 2 is to explore the proposition that individuals will choose strategies that match their chronic regulatory orientation. Study 1 created a set of promotion and prevention focused retirement preparation strategies by using a qualitative approach, which contained a supraliminal priming technique. This addressed a gap in the current literature as to the author's knowledge no such taxonomy currently exists. Achieving a Generalised Kappa of 0.799 the results of an inter-rater test indicated an almost complete agreement between three raters on the categorisation of twenty different strategies as either an Eager Approach type strategy, which is reflective of

proactively ensuring the attainment of positive outcomes or Vigilant Avoidance type strategy which is reflective of being cautious and avoiding negative outcomes or potential losses. In order to further confirm these strategies, Study 2 will use a quantitative approach to test these with a different sample. In this study, participant's chronic regulatory orientation will be assessed initially and then their choice of retirement strategies will be explored. In order to assess individuals' chronic orientation, Study 2 employs the Lockwood, Jordan and Kunda (2002), "General Regulatory Focus Measure" (GRFM). This measure of regulatory focus was created to assess chronic promotion and prevention goals directly and has been well validated (for a review see Summerville & Roese, 2008 and Gorman, Meriac, Overstreet, Apodaca, McIntyre, Park, & Godbey, 2012). A full description and rationale for employing this instrument is described in section 7.3.4 below.

Individuals with a promotion orientation have a sensitivity to the presence and absence of positive outcomes (see Higgins & Tykocinski, 1992), being eager to pursue all means of advancement should be their preferred strategy for self-regulation (Camacho, Higgins, and Luger, 2003). We, therefore, expect promotion-oriented individuals to choose strategies that reflect means of achieving positive outcomes.

Hypothesis 1. Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.

Individuals with a prevention orientation have a sensitivity to the absence and presence of negative outcomes (see Higgins & Tykocinski, 1992), thus being vigilant or careful to avoid mistakes should be their preferred strategy for self-regulation (Camacho et al., 2003). Therefore, we expected

prevention-oriented individuals to choose strategies that contained means of avoiding negative outcomes.

Hypothesis 2. Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies.

7.2 Research Design

Study 2 employed a quantitative design. An online survey was created containing two demographic questions, age and gender included to ensure an equitable cross section of the organisation respondents to the survey. The second section of the survey presented the General Regulatory Focus Measure (GRFM) (Lockwood, Jordan & Kunda, 2002). This consisted of an eighteen-item scale. All items were written in a Likert-type format, with responses made on a 7-point response scale with 1 indicating strong agreement and 7 indicating strong disagreement. Full details of and the rationale for utilising this scale are given in the following sections. As regulatory focus theory states that regulatory focus can be both inherent and situationally induced (Higgins, 1997, 2000), a set of four distractor questions were included to prevent the GRFM directly influencing the individuals responses to the final scale, which is designed to capture individuals preference for either promotion or prevention focused strategies. The scale employed for that purpose contained the retirement strategies designed in Study 1. This contained five multiple-choice questions with four items each to measure the type of strategies preferred by the participants. Full details for each measurement are given in the following sections. The final survey, therefore, consisted of fifteen questions and fifty-seven items. Item randomisation was used for both the GRFM scale and the multiple choice strategy questionnaires. The sequence of presentation was fixed

as required so the distracter questions were consistently positioned between the GRFM scale and the retirement strategies scale.

7.3 Methodology

Ethical approval was sought from Dublin City University Research Ethics Committee and approval was granted (see REC letter of approval Appendix 1).

7.3.1 Participants

The participants for Study 2 were all employees of a large public sector organisation, circa 1000 employees. Permission was sought from the Director General of the organisation to allow an email inviting the staff to participate to be circulated via the internal email distribution list (see permission e-mail Appendix 10). The staff compliment were distributed nationally in both large and small urban locations and consisted of a cross-section of male and female employees varying in age from 18 years to 65 (individuals had to retire at age 65) and varying degrees of remuneration (See Table 7.1 below for details). 236 individuals participated in the survey representing 24% of the overall sample. These figures are described in more detail below.

Table 7-1 Demographics Study Two Participants

	Totals
Gender	Total N.
Male	93
Female	143
Age Bracket	Total %
18-20 Years	1
21-29 Years	38
30-39 Years	16
50-59 Years	37
60 or older	8

7.3.2 Procedure

The Director General of the organisation used in the first study was contacted again and reminded of the first part of the research. The use of the same organisation for a mixed methods research approach is not unusual. Mixed methods for development purposes has been identified as purposeful where the results from one method are used to help develop or inform the other method, where development is broadly construed to include sampling and implementation, as well as measurement decisions (Greene, Caracelli, & Graham, 1989). The development of the survey was explained and permission was sought to have the survey tested among the staff of the organisation. This was granted and an invitation was sent from the Director General via the internal email distribution list. The invitation was worded by me as follows:

Hi everyone. Some of you may remember carrying out a short survey for me a couple of years ago. It was part of my contribution towards a PhD with Dublin City University under the supervision of Dr. Finian Buckley from the Business School. I was overwhelmed by the

response I received and I collected a large amount of rich data. It has taken me this time to distil this data down and I need your help again to verify the outcomes I came up with. I would really appreciate it if you could spare me the time to complete another very short survey to help me achieve this. The survey is made up of three parts and each part should take no longer than 5 minutes to complete. If you would like to take part please click on the link below or copy and paste the URL into your browser. Many thanks.

The survey was distributed in mid December 2013. It was left open until the 7th January 2014 allowing a three-week period for completion.

7.3.3 Responses

There were 236 responses to the survey representing approximately 24% of the target sample. The majority, 220, were received in the first week with the balance received in the following two weeks. After screening the data (see section 7.3.8 below) the final usable sample was 194 (20% of overall sample). Once a staff member agreed to participate the questionnaire link brought them to the opening page of the survey, which contained a version of the plain language statement (a DCU REC requirement). This was designed to encourage the participant to take part but did not contain any information that might create a bias in their responses. On completion of the survey the participants were directed to the final page of the questionnaire containing a detailed explanation of the research programme. The wording for both the opening page and the final page can be seen in Appendix 11

7.3.4 Measurements

General Regulatory Focus Measure (GRFM)

Different methods have been used to measure promotion or prevention focused self-regulatory predilections. Early measurements were made within the frame work of self-discrepancy theory (Higgins, 1987), which relied on calculating discrepancies between actual selves and appropriate self-guides. However, these were time consuming to administer and score. The Regulatory Focus Questionnaire (RFQ) on the other hand measures individual differences in regulatory focus based on subjective histories of success in attaining goals in a promotion or prevention-focused manner. The problem with these was that they used short easy-to-use pencil-and-paper measurements (Higgins et al., 2001). A further possibility for determining regulatory focus lies in recording values which can be attributed either to promotion or prevention. The Schwartz Portrait Questionnaire (SPQ; Schwartz, Brophy, Lin, & Bransford, 1999) has been used to determine regulatory focus (e.g., in Van Dijk & Kluger, 2004) by measuring different value dimensions. Fellner, Holler, Kirchler, & Schabmann, (2007) suggested that measurements like the RFQ and SPQ contained items related to situations experienced in the past, partly even in childhood, in which success or failure were experienced in promotion or prevention situations? Having the items relate to events taking place many years earlier is intended to reduce the tendency to give socially desirable responses.

The measurement used, in this study, for Chronic Regulatory Focus is the Lockwood et al., (2002) "General Regulatory Focus Measure" (GRFM). It was created to assess chronic promotion and prevention goals directly. The items in the questionnaire relate to the importance of different goals and to the correspondingly preferred strategy to achieve a goal (approach or avoidance). Respondents indicate the extent to which they endorse items relevant to

promotion goals (e.g., “I frequently imagine how I will achieve my hopes and aspirations”; “I often think about the person I would ideally like to be in the future”) and items relevant to prevention goals (e.g., “I frequently think about how I can prevent failures in my life”; “I am anxious that I will fall short of my responsibilities and obligations”). These items were designed to tap into the same theoretical constructs used by Higgins and his colleagues (e.g., Förster, Higgins & Idson, 1998; Higgins, Shah & Freidman, 1997; Shah, Higgins & Freidman, 1998), who have measured promotion and prevention focus by calculating differences in the accessibility of ideal and ought self-guides. Accessibility of ideal and ought self-guides is assumed to reflect the strength of promotion and prevention concerns because individuals with promotion goals are concerned with achieving their hopes, wishes, and aspirations, and are thus likely to have accessible ideal self-guides, whereas individuals with prevention goals are concerned with safety, protection, and responsibility, and are thus likely to have accessible ought self-guides. Higgins and his colleagues have also measured regulatory focus by examining individuals’ subjective experiences of success in obtaining past prevention and promotion goals (Higgins et al., 2001). Lockwood et al.’s (2002) measure of promotion and prevention was designed to tap into the theoretical underpinnings of promotion and prevention concerns directly, providing a concise means of assessing them.

Despite the ubiquity and utility of regulatory focus theory, questions remain about both this construct and its measurement. Conceptually, the seminal statement of regulatory focus (Higgins, 1997) presented two distinct conceptualisations of regulatory focus: the self-guide definition, based on whether goals are derived from an attention to desires versus obligations, and the reference-point definition, based on the end-state to which current goal progress is compared (Sumerville and Roese, 2008). The GRFM focuses on the reference-point definition, whereas the Regulatory Focus Questionnaire (RFQ,

Higgins, 1999) focuses on the self-guide definition. The reference-point-based GRFM functions much more like a measure of approach and avoidance (the Behaviour Inhibition System/Behaviour Activation System, BIS/BAS, Carver & White, 1994) than like the RFQ, which is closer to the self-guide definition. As the current study is interested in the type of strategies (approach or avoidance) the GRFM was chosen as the appropriate measure.

The Gorman et al. (2012) meta-analysis of thirty studies showed the GRFM to have mean internal consistency estimate (Cronbach's α) of .82 for promotion focus compared to the "Regulatory Focus Questionnaire" (RFQ) (Higgins et al, 2001) which had a mean α for promotion focus of .70. For prevention focus the mean α for the GRFM was .82 and the mean α for the RFQ was .80. The GRFM was employed for the current study and asked the respondents to rate the eighteen statements from 1 'Not at all true of me' to 7 'Very true of me'. In the current study the α for the promotion scale of the GRFM is .88 and the α for the prevention scale is .84.

7.3.5 Retirement Strategies

The five questions developed in Study 1 were administered in the final study with the following instructions:

Thank you for completing part two.

Part three is a five-part questionnaire that requires you to choose two out of four possible answers. There are no wrong answers in this part as we are interested in what strategies individuals might choose in preparation for the future. As you will see there are many strategies that can be pursued to achieve the same goal. Please choose the two that you believe would be the best option for you and your circumstances.

As not all of the target sample of the survey were approaching retirement the words “in your retirement” were replaced by “in the future”. A sample question from the scale is:

When you think about preparing for FINANCIAL SECURITY in the future which TWO of the following strategies would you choose to pursue now to prepare for it?

This change in emphasis was required so the strategies became meaningful to all participants no matter what their age was. As van Tilburg and Igou propose “inferences of meaningfulness of behaviour are subjective and context sensitive” (2013, p. 375). Each individual item was also presented in such a way as to emphasise the theme of the question as well as the requirement to select two out of the four possible answers. The full set of strategies and corresponding questions are displayed in table 7.2 below:

Table 7-2 Retirement Preparation Strategies

Question	Type:	
	Approach	Avoidance
When you think about preparing for FINANCIAL SECURITY in the future which TWO of the following strategies would you choose to pursue now to prepare for it?	Plan ahead and try to maximise my savings.	Don't take on additional debts. Pay off existing loans.
	Save money or possibly invest to fund a better lifestyle.	Err with caution and put some money aside.
When you think about preparing for HEALTH in the future which TWO of the following strategies would you choose to pursue now to prepare for it?	Continue with or develop a healthy diet now.	Ensure to have adequate medical insurance.
	Participate in some form of exercise to increase fitness.	Have regular medical check-ups to avoid any medical problems.
When you think about WORKING after retirement which of the following TWO strategies would you choose to pursue now to prepare for it?	Explore continuing similar work to my current career or retrain to do something else	Avail of training early to prevent my skills becoming out of date
	Attend a course of training. Keep up with technology in order to work from home	Look for part-time work in a niche area to avoid money shortages in retirement
When you think about REMAINING ACTIVE in the future which TWO of the following strategies would you choose now to prepare for it?	Plan a structured day. Utilise time to achieve goals like gardening or reading	Will have to develop a hobby in case I get bored with current activities.
	Develop skills and have plenty of hobbies, which can be continued or taken up.	Will have to look for a part-time job in order to supplement income
When you think about how you might CONTRIBUTE TO YOUR COMMUNITY in the future which TWO of the following strategies would you pursue now to prepare for that?	Learn new skills so as to offer my services in a positive way for some community group	Build up involvement with a group slowly. Don't become over involved as may be difficult to step back
	Actively research and identify a group to see if my involvement would improve their current situation	Remain active in existing club/association as it is easier to continue if already involved

7.3.6 Data Preparation

In order to prepare the data for analysis a number of steps were adopted. Firstly, the data was examined for any missing item or scale scores. Secondly, the data was screened for normality, errors, outliers or potential issues of multicollinearity. The data analysis strategy was designed beginning with an examination of the measurement model and followed by an assessment of the structural model.

7.3.7 Missing Data

Newman (2009) suggests that missing data does not only exist at participant level but also at item and survey level. Screening of data in a survey instrument should be carried out at item, survey and participant level with any or all of these issues having the potential to cause statistical power and external validity problems. Deploying an online survey questionnaire, particularly one consisting of a large number of scales, runs the risk of non-participation, failure to complete the survey or failure to respond to certain items. Where possible safeguards can be built in to minimise the failure to complete items the other two situations cannot be controlled for. However, it is crucial to assess the missing data to ascertain if there are any patterns to it or if it is completely random. Little and Rubin (2002) suggest that three categories can be applied to missing data, namely: missing completely at random (MCAR); missing at random (MAR); and missing not at random (MNAR). Missing completely at random refers to missing data which is unrelated to any other observed or missing variables; this is the only pattern which is non-systematic. Missing at random describes a pattern of missing data. This can be related to some of the observed variables in a data set but not to the values of missing variables.

Finally, missing not at random refers to data, which is missing as a result of the value of missing variables. Newman (2009) would argue that it is the systematic missing data patterns, MAR and MNAR, which are considered potentially damaging in their ability to bias parameter estimates.

IBM SPSS Statistics (Version 21, Release Date 2012) was the statistical tool utilised to analyse the data for the current study. The various techniques available within SPSS were availed of to screen the data. As levels of missing data can vary from minor, to moderate, to serious, the procedures for dealing with them can also be more or less stringent. Tabachnick and Fidell (2007) suggest that less than 5% of missing data is the least serious and, therefore, require less stringent procedures to deal with them. In the initial examination of the current survey there was a significant level of missing data at the survey level and it was difficult to establish the true nature of the missing data at item level until this was scrutinised further. The first issue discovered was that 40 of the 236 participants did not venture past the agreement to participate or the demographic questions. An examination of these cases failed to find any pattern in terms of date of participation, sequence of participation or demographics. These missing cases were, therefore, classified as MCAR. Once these 40 cases were removed, the final 196 respondents exhibited 100 percent completeness at item level.

7.3.8 Data Screening

Frequencies and descriptive statistics for all study variables were carefully examined to check the distribution of responses and the characteristics of the sample. Means, medians, standard deviations, and minimum and maximum scores were generated for each variable to ensure that all values were plausible and within the expected range (Tabachnick & Fidell, 2007).

Examining these descriptive statistics also provided a check for minor errors in data entry.

To check for multicollinearity a correlation matrix was developed for all variables in the current study. Multicollinearity describes a situation where variables in a study are very highly correlated to the point that they pose a threat to the validity of the data analysis. A range of thresholds have been proposed as an appropriate cut off point for multicollinear variables from .75 (Ashford & Tsui, 1991) to .90 (Saunders, Lewis, & Thornhill, 2009). Examination of the correlation matrix for variables in this study indicates that there are no correlations above .45. Therefore, it was determined that multicollinearity is unlikely to be a problem in this research.

7.3.9 Data Analysis Strategy

The data analysis strategy employed in Study 2 involved two stages. Firstly, the measurement model specified in the study will be inspected to confirm the factor structure, the internal consistency of each measure and to examine the descriptive statistics and the relationships between study variables. Secondly, the analysis will focus on the structural model and the testing of the study hypotheses.

Factor analysis is a method of representing the interrelationships between large numbers of observed variables (e.g., items in a questionnaire) with a smaller number of latent variables (Bollen, 1989). Chronic Regulatory Focus Measure, the first of the independent variables in the current study, is theorised as having a two-factor structure. Prior to performing the Principal Component Analysis (PCA) the suitability of the data for factor analysis is assessed. A correlation matrix was created and reviewed (See Appendix 11 for results). Tabachnick and Fidell (2001) recommend coefficients above 0.3. The

Kaiser-Meyer-Okin value (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) is checked for significance. The Bartlett's Test of Sphericity should be significant ($p < .05$) for factor analysis to be considered appropriate. The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis (Tabachnick & Fidell, 2001). PCA is then carried out using Varimax rotation (Thurstone, 1947). Finally the relationship between GRFM and the type of strategies chosen is tested using a one way between groups multivariate analysis of variance.

7.3.10 Results

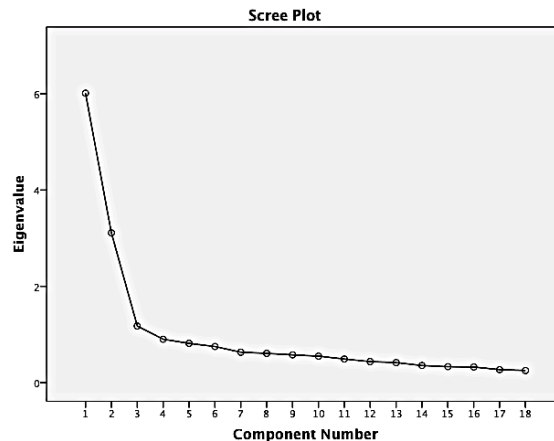
General Regulatory Focus Measure

As stated earlier, in the current study the Cronbach's α for the promotion scale of the GRFM is .88 and for the prevention scale is .84. To further investigate the structure of the GRFM, the 18 items were subjected to Principle Component Analysis, using SPSS Version 21. Prior to performing the PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Okin value was .88, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($p = .000$) supporting the factorability of the correlation matrix.

Principle Components Analysis revealed the presence of three components with Eigenvalues exceeding 1, explaining 33.4 percent, 17.28 percent and 6.54 percent of the variances respectively. An inspection of the screeplot revealed a clear break after the second component (See Fig 7.2). Using Catell's (1966) scree test, it was decided to retain two components for further investigation. This was further supported by the results of Parallel Analysis,

which showed only two components with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same sample size (18 variables X 196 respondents).

Figure 7.2 Scree Plot for GRFM Exploratory Factor Analysis



To aid in the interpretation of these two components, Varimax rotation was performed. The rotated solution revealed the presence of simple structure (Thurstone, 1947), with both components showing a number of strong loadings and the two component solution explained 50.68 percent of the variance. Item factor loadings can be seen in Table 7.3 below. These loadings did however reveal that two items cross loaded onto the two components. Close examination showed that the first item loaded significantly more on the component theorised (.62 versus .34). Examination of the item itself supported retention of the item. The wording of the item is “I often think about the person I would ideally like to be in the future”. The loading on factor two was only barely above .3 and as there would not appear to be anything contradictory in the wording there was no rationale to reject it. The second item did load more significantly on the opposite component to that theorised (.52 versus .42). The wording for this item was “I see myself as someone who is primarily striving to become the self I

“ought” to be to fulfil my duties and obligations”. Although examination of the item did not reveal any reason to remove it as .42 is still well above the cut off of .3 and the wording seemed to be clearly prevention focused as against promotion focused. It was decided to retain the item on the opposing factor and run the full scale in the following Manova.

Table 7-3 Item Factor loadings for General Regulatory Focus Measure

Item	Item Factor Loadings	
	Factor 1	Factor 2
I often think about how I will achieve success.	0.81	0.16
I typically focus on the success I hope to achieve in the future.	0.79	0.07
I see myself as someone who is primarily striving to reach my “ideal self”—to fulfil my hopes, wishes, and aspirations.	0.78	0.08
My major goal right now is to achieve my lifelong ambitions.	0.74	0.09
I frequently imagine how I will achieve my hopes and aspirations.	0.72	0.26
Overall, I am more oriented toward achieving success than preventing failure.	0.70	-0.09
In general, I am focused on achieving positive outcomes in my life.	0.62	-0.17
I often think about the person I would ideally like to be in the future.	0.62	0.34
I often imagine myself experiencing good things that I hope will happen to me.	0.57	0.25
I see myself as someone who is primarily striving to become the self I “ought” to be to fulfil my duties, responsibilities, and obligations.	0.52	0.42
My major goal right now is to avoid becoming a failure.	0.16	0.73
I often worry that I will fail to accomplish my goals.	0.20	0.73
I am anxious that I will fall short of my responsibilities and obligations.	0.08	0.72
I often think about the person I am afraid I might become in the future.	0.00	0.71
I often imagine myself experiencing bad things that I fear might happen to me.	-0.03	0.70
I frequently think about how I can prevent failures in my life.	0.15	0.70
I am more oriented toward preventing losses than I am toward achieving gains.	-0.01	0.63
In general, I am focused on preventing negative events in my life.	0.20	0.46
Eigen Values	6.01	3.11
% of Variance	33.4	17.28
α	.88	.84

Note: Boldfaced factor loadings indicate item-factor designations

7.3.11 Hypothesis Testing:

Hypothesis 1. Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.

Hypothesis 2. Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies.

In the original study by Higgins et al (1994) participants chronic regulatory focus grouping was assigned by subtracting their prevention score from their promotion score and then by use of a median split they were assigned as either promotion focused group or prevention focused group. A test of between groups was then conducted to compare the type of strategies preferred by either group. In the current study the same approach was followed and a new variable, Chronic Regulatory Focus Group, was created. A one way between groups multivariate analysis of variance was performed to investigate differences in strategy choice between chronic promotion focus and chronic prevention focus groups. Two dependent variables were used. These were Total Promotion Strategies Chosen and Total Prevention strategies Chosen. The independent variable was Chronic Regulatory Focus Group. Preliminary assumption testing was conducted to check for, sample size, linearity, univariate and multivariate normality, and multicollinearity with no serious violations noted.

Descriptive statistics confirmed a final sample size of 196 and an inspection of the histogram along with the Kurtosis and Skewness statistics (-.62 and .05 for total promotion score -.13 and -.44 for total prevention score) the data is within the acceptable levels of univariate normality for such a sample size (Tabachnick & Fidell, 2001). The Mahalanobis distance was lower than the critical value for two independent variables (13.82 Tabachnick & Fidell, 2001)

at 8.62 confirming multivariate normality was within acceptable parameters. A scatterplot was created for the two independent variables of total promotion and total prevention strength. These plots showed no evidence of non-linearity; therefore the assumption of linearity was satisfied. A Pearson r value of .36 was obtained for the two independent variables. This value is in the medium range and well below .8 or .9 which would otherwise indicate problems with multicollinearity. Finally Levene's test of Equality of Error Variances results, significance of .55 is well above 0.05 and indicates that we can assume equality of variances for the data.

There was a statistically significant difference between chronic promotion focus individuals and chronic prevention focused individuals on the type of strategies chosen: $F(1, 179) = 11.08, p = .000$; Wilks' Lambda = .94; partial eta squared = .06. An inspection of the mean scores indicated that Chronic Promotion Focused individuals chose slightly more promotion type strategies ($M = 6.10, SD = 1.36$) than Chronic Prevention Focused individuals ($M = 5.41, SD = 1.39$). Equally Chronic Prevention Focused individuals chose slightly more prevention type strategies ($M = 4.59, SD = 1.39$) than Chronic Promotion Focused individuals ($M = 3.91, SD = 1.36$), see Figures 7.3 and 7.4 below.

Figure 7.3 Mean number of promotion strategies chosen

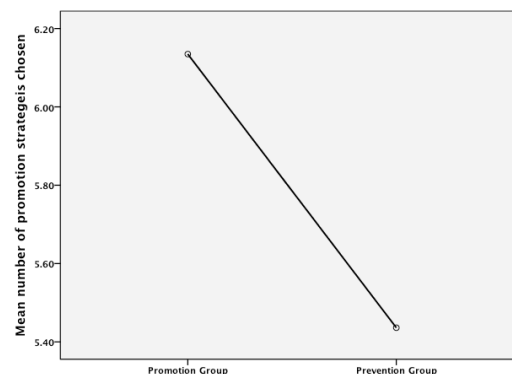
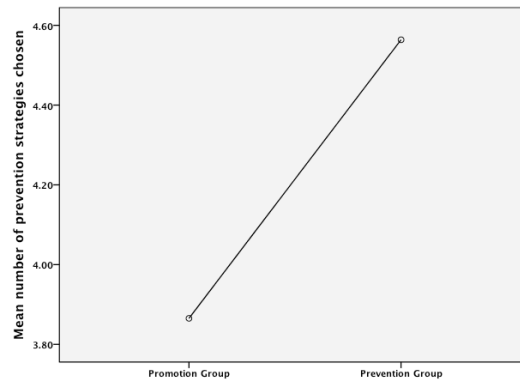


Figure 7.4 Mean number of prevention strategies chosen



A lot of research suggests that continuous variables should not be divided by using a median split (see Irwin & McClelland, 2003 and McCallum et al., 2002 for example). For robustness a simple linear regression was conducted to check for a linear relationship between GRFM strength and strategies chosen and test Hypothesis 3.

Hypothesis 3: General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen.

To calculate GRFM Strength individual's prevention scores were deducted from their promotion scores. Higher values indicating greater promotion strength and lower values indicating greater prevention strength.

A simple linear regression was calculated to examine the total number of promotion strategies chosen based on GRFM Strength. A significant regression equation was found ($F(1, 181) = 16.79, p < .001$), with an R^2 of .09. Participants' predicted promotion scores are equal to $5.35 + .03$. Participants' average promotion scores increased .03 for each unit of measure of GRFM Strength.

Table 7-4 Hierarchical Regression: GRFM Strength on Total Number of Promotion Strategies Chosen

	<i>B</i>	<i>SE</i>	β	<i>t</i>
<i>DV: Total Promotion Strategies Chosen</i>				
Constant	5.49	0.12		44.34
GRFM Strength	0.33	0.09	0.29	4.10

Note $R^2 = .09$ ($p < 0.001$)

7.4 Preliminary Discussion.

The aim of Study 2 was to explore the proposition that individuals will choose strategies that match their chronic regulatory orientation. Results of this study demonstrated that individuals who were more promotion oriented were more likely to choose promotion approach strategies than individuals who were more prevention oriented whereas prevention oriented individuals were more likely to choose prevention avoidance strategies than promotion oriented individuals.

The results of the independent sample t-test in the current study revealed a significant difference between the two groups, with Chronic Promotion Focused individual's choosing more promotion type strategies than Chronic Prevention Focused individuals. Equally Chronic Prevention Focused individuals chose more prevention type strategies than Chronic Promotion Focused individuals. This is similar to the original study by Higgins et al. (1994) where an independent-sample test determined a significant difference between the two groups in that study, with promotion orientated subjects choosing more approach strategies than predominant prevention oriented subjects. The same statistical results were obtained when testing for the number

of avoidance strategies chosen, with predominant prevention subjects choosing significantly more avoidance strategies than predominant promotion subjects.

Because individuals in a promotion focus have a sensitivity to the presence and absence of positive outcomes (see Higgins & Tykocinski, 1992), being eager to pursue all means of advancement (i.e., hits) should be their preferred strategy for self-regulation (Camacho et al., 2003). We expected promotion focused individuals to choose strategies that contained means of achieving positive outcomes (“Save money or possibly invest to fund a better lifestyle” for example). Because individuals in a prevention focus have a sensitivity to the absence and presence of negative outcomes (see Higgins & Tykocinski, 1992), being vigilant or careful to avoid mistakes (i.e., correct rejections) should be their preferred strategy for self-regulation (Camacho et al., 2003). Therefore, we expected prevention focused individuals to choose strategies that contained means of avoiding negative outcomes (“Have regular medical check-ups to avoid any medical problems” for example).

Shah and Higgins (2001) examined the strength of regulatory focus influence on individuals’ efficiency in making emotional appraisals of common attitude objects. It was predicted that individuals with a strong promotion focus would be especially efficient in emotionally appraising attitude objects along the cheerfulness-dejection dimension whereas individuals with a strong prevention focus would be especially efficient in emotionally appraising attitude objects along the quiescence-agitation dimension. As predicted, participants’ ideal strength (promotion focus) was uniquely related to how quickly they appraised the objects in terms of cheerfulness and dejection, whereas participants’ ought strength (prevention focus) was uniquely related to how quickly they appraised the same objects in terms of relaxation and agitation. Thinking about the future for some individuals can be an emotional process.

Results from this study demonstrate that there can be a difference in the way retirement preparation strategies are interpreted, depending on an individual's regulatory orientation and accounting for meaningfulness. This has implications for the individual as the type of strategies they pursue affects the outcomes of their retirement decisions and planning. With previous research the focus has been on the antecedents of planning and some general strategies used to achieve them. Now with the creation of this new set of strategies it will be possible to integrate specific strategies with individual regulatory orientations and look at the consequences of pursuing retirement preparation goals with matching and non-matching strategies.

Previous attempts at developing promotion and prevention type strategies focused on beliefs about the utility of promotion and prevention focused self-regulatory strategies. Ouschan, Boldero, Kashima, Wakimoto, & Kashima (2007) for example developed a Regulatory Focus Strategies Scale (RFSS). While as predicted, the RFSS subscales correlated with other measures of motivation and self-regulation such as the BIS/BAS (Carver & White, 1994) and the Sensitivity to Reward and Punishment Questionnaire (SPSRQ, Torrubia, Avila, Moltó, & Caseras, 2001) and weaker for scales reflecting goal-based regulatory focus, such as the RFQ (Higgins et al., 2001), and the Rosenberg Self Esteem scale (RSES, Rosenberg, 1965), the study did not go further and test the predictive power of the RFSS.

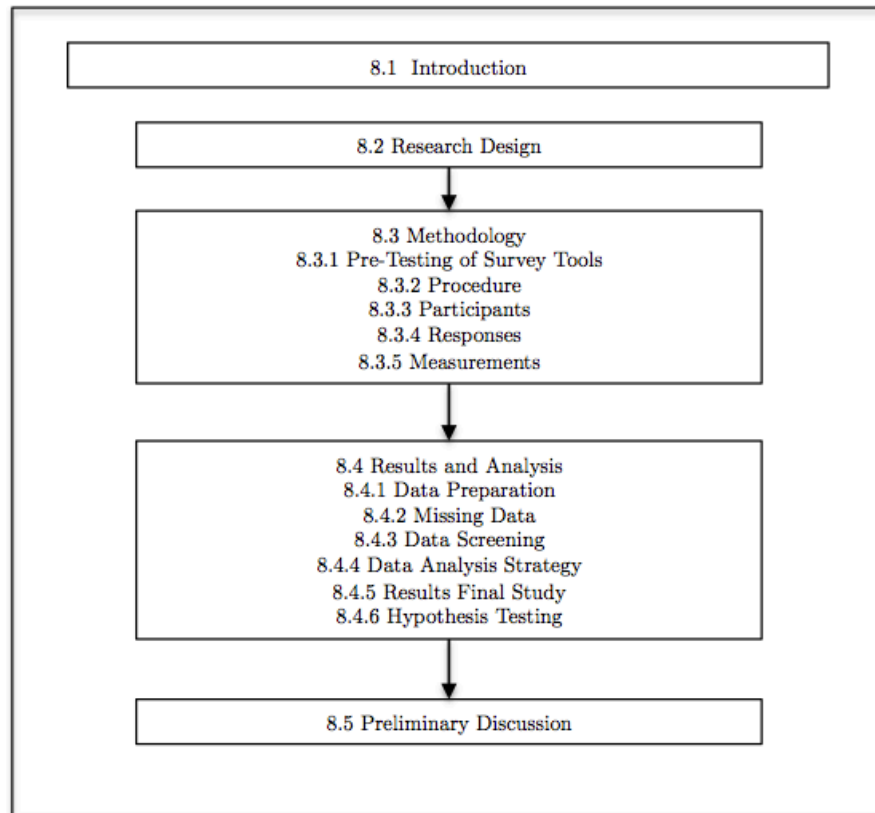
The final study in the current research programme explores both the predictive power of the approach and avoidance strategies developed and tested in Studies 1 and 2 and also the impact that pursuing approach and avoidance strategies have on outcomes relative to retirement preparation. To achieve this, the strategies are assessed in relation to the relationship between individual's chronic regulatory focus and their pre-retirement anxiety levels and feelings of

well-being. This is examined through the lens of regulatory fit theory (Higgins et al., 2003; Cesario, Grant, & Higgins, 2004; Spiegel et al., 2004).

Regulatory fit occurs when a situation is framed in a manner that is consistent with the participants' chronic or temporarily induced regulatory focus. Thus, those with greater relative endorsement of promotion strategies should value the outcome of that decision more highly if they make decisions using promotion strategies than if they make decisions using prevention strategies. Similarly, decisions made using strategies that 'fit' relative strategy endorsement should 'feel right' relative to those made using strategies that do not 'fit'. Likewise, messages should be more persuasive when they are consistent with relative strategy endorsement (Ouschan et al., 2007). Study 3 will explore these contentions and will seek to discover if regulatory fit between chronic focus and the retirement strategies developed in Study 1 and tested in Study 2 have any impact on pre-retirement anxiety or affect.

Chapter 8 Study 3

Figure 8.1 Layout of Chapter 8



8.1 Introduction

Thus far, Study 1 delivered the development of a set of approach and avoidance retirement preparation strategies. The aim of Study 2 was twofold. It was designed to substantiate the applicability of the instrument designed in Study 1 while, at the same time, exploring the tendency of individuals to choose strategies that match their chronic regulatory orientation. Results from Study 2 showed that chronic promotion focused individuals preferred more promotion approach strategies than did chronic prevention focused individuals. The opposite was also confirmed with chronic prevention focused individuals

preferring more prevention avoidance strategies than chronic promotion individuals. This study indicated that individuals choose strategies that match their chronic regulatory orientation.

As Study 2 confirmed that there is a relationship between regulatory orientation and strategy types, the final study in this research programme seeks to extend the scope of Study 2. It will assess the proposition that, the type of strategies chosen will moderate the relationship between chronic regulatory orientation and pre-retirement anxiety and positive and negative affect. As there was no taxonomy of promotion and prevention type retirement preparation strategies previously available, the main aim of this study is to add to the current literature. It will examine the impact of regulatory fit (Higgins, 1994, 2000) on pre-retirement anxiety and positive and negative affect.

The following sections outline the approach taken in the final study of this research programme. Employing a quantitative methodology, an online survey was created to address the research questions developed in Chapter 6. Initially, the steps carried out in Study 2 will be repeated.

Hypothesis 4: Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.

Hypothesis 5: Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies.

This will again substantiate the applicability of the strategies developed in Study 1 and test the hypothesis that individuals will prefer strategies that match their chronic regulatory orientation. Study 3 is also interested in examining the relationships between chronic orientation, construal level, type of strategies chosen and retirement anxiety and affect. The strength measure of

regulatory focus (GRFM) was utilised to examine these relationships with the Study 3 participants.

Hypothesis 6: General Regulatory Focus Measure (GRFM) strength will be positively associated with the number of promotion strategies chosen by participants of Study 3.

As strategies chosen are limited to ten out of twenty possible answers scores for promotion strategies denotes the scores for the prevention strategies. Maximum score for an individual, therefore, is either 10 promotion 0 prevention or 10 prevention 0 promotion.

The proposed relationship between regulatory focus strength and pre-retirement anxiety is established through hypothesis 7.

Hypothesis 7: GRFM Strength will be negatively associated with pre-retirement anxiety.

This research also proposed that a fit between regulatory focus orientation and the type of strategies chosen will impact on the levels of pre-retirement anxiety and positive and negative affect reported. Hypotheses 8 to 12 propose that the type of strategies chosen will moderate the relationship between chronic regulatory focus and the levels of pre-retirement anxiety and affect. The proposed relationship between chronic regulatory focus and positive affect and negative affect is established with hypotheses 8 and 9.

Hypothesis 8: GRFM Strength will be positively associated with positive affect (PA).

Hypothesis 9: GRFM Strength will be negatively associated with negative affect (NA).

Greater fit between GRFM strength and the type of strategies chosen should decrease the levels of pre-retirement anxiety and negative affect. Also greater fit should increase the levels of positive affect. These are all tested with the following hypotheses.

Hypothesis 10.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”).

Hypothesis 10.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”).

Hypothesis 11.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”).

Hypothesis 11.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength

and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”).

Hypothesis 12.1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM Strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”).

Hypothesis 12.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM Strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”).

The following sections will explain the methodological issues considered in this study. The approach to the research design will be explained with reference to the sample employed, the variables used and the data analysis strategy utilised to test the hypotheses set out in Table 8.1 below.

Table 8-1 Summary of Hypotheses

Hypothesis	Study Number
4. Chronic promotion orientated individuals will choose more promotion type strategies than prevention type strategies.	3
5. Chronic prevention orientated individuals will choose more prevention type strategies than promotion type strategies	3
6. General Regulatory Focus Measure (GRFM) Strength will be positively associated with the number of promotion strategies chosen by participants in Study 3.	3
7. GRFM Strength will be negatively associated with pre-retirement anxiety.	
8. GRFM strength will be positively associated with positive affect (PA).	3
9. GRFM strength will be negatively associated with negative affect (NA).	3
10.1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater “fit”).	
10.2 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater “fit”)..	
11.1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and PA such that the levels of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater “fit”).	3
11.2 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and PA such that the levels of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater “fit”).	
12. 1 The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and NA such that the levels of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are high (therefore a greater “fit”).	3
12.2 Type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and NA such that the the levels of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are low (therefore a greater “fit”).	

8.2 Research Design

Study 3 employed a quantitative design. An online survey was created containing eight demographic questions; gender; age; intended retirement age; household income; marital status; number of dependent children; tenure and education. These were introduced in Study 3 in order to control for their effects on the dependent variables.

A number of short scales were included to measure self-reported satisfaction with current health, a four item scale adopted by Adams, 1994. Satisfaction with life, a five item scale (Diener, Emmons, Larsen, & Griffin, 1985) and satisfaction with work assessed by the Job Satisfaction subscale of the Michigan Organisational Assessment Questionnaire (MOAQ – JSS) (Bowling & Hammond, 2008). This is a three-item scale.

The independent variable for the current study is chronic regulatory focus and Study 3 utilises the same instrument as study two, the GRFM (Lockwood & Kunda, 2002). The multiple-choice questions developed in Study 1 to measure approach and avoidance retirement preparation strategies were employed in Study 3. A measure of the individual's construal level, using the Behaviour Identification Form, a twenty five item multiple-choice measure designed by Vallacher et al, 1989, was also employed.

To measure the dependent variables, two instruments were employed. For pre-retirement anxiety, the twenty three item Social Components of Retirement Anxiety (Fletcher & O'Hansson, 1991) was used. The twenty item Positive Affect Negative Affect Schedule (Watson et al, 1988b) was used to measure positive and negative affect.

Apart from the demographic questions and the first scale (GRFM) the order of scales within the survey were randomised. In order to achieve scale

randomisation a question was inserted asking participants to choose one of four colours. The wording of the question was “Which of the following colours do you like best?” The colour they choose determined the presentation sequence of the subsequent measurement scales. Four choices were presented as that allowed a complete set of possible sequences to occur. The items within each scale were also randomised.

8.3 Methodology

Ethical approval was granted by Dublin City University Research Ethics Committee (The letter of approval can be seen in Appendix 1).

8.3.1 Pre-testing of Survey Tools

To test the face validity of the survey in the research context, the questionnaire was distributed to experienced researchers in DCU Business School and University of Limerick, Psychology Department. Advice was sought regarding the theoretical relevance of the variables and the appropriateness of the survey structure. The order of presentation of the various measurements was discussed and the limitations of the survey host’s online survey tool, with regards to randomisation, highlighted some difficulties in achieving the ideal randomisation and management of common method bias issues (Podaskoff, Mckenzie, Lee, & Podaskoff, 2003). A novel solution was trialled where a question was inserted asking participants to choose one of four colours. The colour they chose determined the presentation sequence of the subsequent measurement instruments. This allowed the initial set of questions to be presented in order and the balance of the questions to be presented in a

different order. Four choices were presented allowing a complete set of possible sequences to occur. Full details and description of the final version of the survey is described in the measures section below.

As a further pilot test, the survey was also circulated to ten individuals, in a number of public and civil service organisations, who were approaching retirement. Feedback was sought from the individuals regarding the instructions, if they were clear and easy to follow, and the length of time taken to complete the survey. There was some concern expressed regarding the clarity of some of the survey instructions, particularly around the instrument for measuring construal level. It was felt that an example should be given as part of the instructions. This was added to the final survey. Also, where there was more than one choice required, the instructions were changed to ensure the word two was highlighted in capitals. For example: *Please choose the TWO that you believe would be the best option for you and your circumstances.*

8.3.2 Procedure

The Principal Officer with responsibility for Human Resource Management in the target organisation was contacted, initially by phone and then by email, to request permission from the organisation to circulate a link to the online survey. It was originally intended that the survey would be targeted at just those employees that were over fifty years of age. However, the organisation was concerned that this would constitute a breach in data protection. They also refused to allow the invitation to participate to proceed by way of emailing the general distribution list for all staff. Eventually, it was agreed to publish an invitation to participate on the organisations intra-net under the staff general work and social section. Notifications for additions to this section are published on the front page of the intra-net so a short message

making staff aware of the retirement survey was published there. The link to the survey remained on the intra-net for twelve weeks.

8.3.3 Participants

This study was carried out in a large civil service organisation in Ireland in 2014. The organisation employs circa 7,000 employees and was chosen due to its size and structure. Employing individuals at different grades, and throughout the island of Ireland, ensured a sample with a varied cross-section of gender, age and income, along with urban and rural dwellers. The target group for the survey were individuals who intended to retire within ten years. To assess the possible sample size the organisation confirmed that as of March 2014 there were just over 3,000 individuals over the age of 50. Of these, the precise gender breakdown was unknown but, as a whole, the organisation consists of approximately two thirds female and one third male. Regarding income level, the grade structure in the organisation is quite large with over seven different grades. However, nearly 50% of the final sample indicated that they were married with a working spouse, therefore, household income is what is reported in the study.

A number of other demographics were collected including age and expected retirement age which were required to calculate the temporal distance from retirement, a study control variable. Household income was collected as positive financial status has been shown to predict positive retirement adjustment (e.g., Gall et al., 1997; Pinquart & Schindler, 2007; Quick & Moen, 1998). Family related variables that have shown to be negatively related to retirement adjustment include number of dependent children (Kim & Feldman, 2000; van Solinge & Henkens, 2005, 2008). Therefore, number of dependent children and age of youngest child was collected. Marital status was also

collected as it is shown to be highly correlated with successful retirement adjustment (e.g., Kim & Moen, 2001; Price & Joo, 2005; Pinguart & Schindler, 2007).

Education has been shown to affect retirement attitude (Joo & Pauwels, 2002; Mutran, et al., 1997; Turner, Oakes, Haslam, & 1994). Turner, et al. (1994) found that those with some high school education, a high school degree, or some college education were likely to have more negative attitudes toward retirement. Additionally, Joo and Pauwel (2002) found that those who had higher levels of education had higher levels of retirement confidence (Kim, et al., 2005). Simply being tired of work has also been seen as a push factor for some to retire (Beehr, et al., 2000) therefore tenure was also included as a control variable.

8.3.4 Responses

Previous research has shown non-response to surveys is not an uncommon problem for researchers and there are numerous reasons as to why this occurs. According to Fenton-O'Creevy (1996) almost two thirds of non-respondents report that they did not complete the questionnaire as they were either too busy, felt the research was irrelevant to them, were unable to return the questionnaire, or were not encouraged to by company policies.

As the current research depends on attaining a significant sample size, several strategies were employed to encourage the staff to participate. Along with the notice section on the front page of the intra-net described above there is also a "Thank you Section" that allows staff members to thank other staff or sections of the organisation.

Table 8-2 Demographics of Study 3 Participants

Demographic	N	Percentage	Mean	SD
Gender	Total 294			
	Female 198	Female 67.3		
	Male 96	Male 32.7		
Age	Total 294		56.11	4.66
Expected Retirement age	Total 294		61.21	3.62
Education Level	Total 294			
	No formal education	2		
	Intermediate/Junior Certificate	6.5		
	Leaving Certificate/A Levels	34.7		
	Post Leaving Certificate	7.1		
	Diploma	23.8		
	Undergraduate Degree	19		
	Post Graduate Master's Degree	6.5		
	PhD	0.3		
Tenure	Total 192		19.47	12.43
Marital status	Total 288			
	Married/Partnered (spouse working)	49.3		
	Married/Partnered (spouse not working)	19.1		
	Divorced/Separated	14.2		
	Unmarried	13.2		
	Widowed	4.2		
Household Income	Total 294			
	Over 100,000 per annum	8.8		
	81,000 to 100,000 per annum	16.7		
	61,000 to 80,000 per annum	20.1		
	41,000 to 60,000 per annum	40.5		
	21,000 to 40,000 per annum	12.6		
	0 - 20,000 per annum	1		

Half way through the collection period, I posted a “thank you” simply stating a thank you to all staff that had participated and that the survey would

be available for another couple of weeks if anyone else would like to take part. I also contacted a number of section managers that I knew personally and asked them to verbally make their staff aware of the survey and encourage them to participate. There were 387 responses to the survey, which represents almost 13% of the possible target group. The majority, 310, were received in the first four weeks with 48 and 29 received in the following two four week blocks respectively. After screening the data (see chapter below) the final sample was 294 made up of 33% male and 67% female. The age range of the final sample was 35.5 years to just over 65 years of age. Only 19 or 6.5% of the sample were under the age of 50.

Once a staff member agreed to participate the link brought them to the opening page of the survey, which contained a version of the plain language statement. This was designed to encourage the participant to take part but did not contain any information that might create a bias in terms of the answers they gave. On completion of the survey the participants were directed to the last page which contained a fuller explanation of the research. The wording for both the opening page and the final page can be seen in Appendix 14.

8.3.5 Measures

Control Variables

Three short measures, one for self-reported satisfaction with health, one for self-reported satisfaction with life and one for self-reported job satisfaction were also included for control purposes. Research has demonstrated that individuals that report good health tend to report more positive adjustment and life satisfaction (Quinn, et al., 1990; Taylor & Shore, 1995; Wong & Earl, 2009).

Life satisfaction levels are also shown to predict anticipated retirement satisfaction (e.g., Palmore, et al., 1984).

Health status was measured with four items measured on a 7 point likert scale from completely agree to completely disagree. The first item was, "Overall, I am very satisfied with my health" (Krause, 1991). The second item was, "My health is better than most people my age" (Hatch, 1992). The third item was, "My health limits my work" (Ekerdt & DeVinney, 1993). The fourth item was, "Generally speaking, my health is very good." Scores for this measure was computed by totalling the scores for the items comprising the measure (Adams & Beehr, 1991). The four-item scale achieved a Cronbach's α of .88 in the present study.

The Satisfaction With Life Scale, SWLS, (Pavot & Diener, 1993) was used to measure general satisfaction with life. It contains five items measured on a 7 point likert scale from strongly disagree to strongly agree. An example item is "In most ways my life is close to my ideal". Scores for this measure was computed by totalling the scores for the items comprising the measure. The five-item scale achieved a Cronbach's α of .85 in the present study.

The Michigan Organisational Assessment Questionnaire (MOAQ) was developed as an alternative to the Job Diagnostic Survey (JDS; Hackman & Oldham, 1980). The current study uses the Job Satisfaction Sub-scale of the MOAQ. Scores on the MOAQ-JSS are computed by totalling the scores for the following three items (note that the second item is reversed-scored):

"All in all I am satisfied with my job."

"In general, I don't like my job."

"In general, I like working here."

Although the original version of the MOAQ-JSS used a 7-point agree–disagree scale (Cammann, Fichman, Jenkins, & Klesh, 1979, Cammann, Fichman, Jenkins, & Klesh, 1983), some researchers have used 5-point (e.g., Allen, 2001; Grandey, 2003) and 6-point (e.g., Brasher & Chen, 1999; Fox & Spector, 1999) versions of the measure. The present study uses the 7 point likert scale from completely agree to completely disagree. This three-item scale achieved a Cronbach’s α of .91 in the present study.

General Regulatory Focus Measure (GRFM)

The same measurement used for Chronic Regulatory Focus in Study 2 was employed again in Study 3. For details of the “General Regulatory Focus measure” (GRFM, Lockwood, et al., 2002) see Study 2, section 7.3.4. This scale achieved a Cronbach’s α of .84 in the present study.

Retirement Strategies

The five questions developed in Study 1 were administered in the final study with the following instructions:

Part three begins with a five-part questionnaire that requires you to choose TWO out of four possible answers. This is followed by two more short questionnaires.

There are no wrong answers in this part as we are interested in what strategies individuals might choose in preparation for their retirement.

As you will see there are many strategies that can be pursued to achieve the same goal. Please choose the TWO that you believe would be the best option for you and your circumstances.

As in Study 2 each individual item was also presented in such a way as to emphasise the theme of the question as well as the requirement to select two

out of the four possible answers. As the target sample in Study 3 were individuals approaching retirement the questions contain a reference to retirement as opposed to the future, which was used in Study 2. A sample item from the scale is:

When you think about preparing for FINANCIAL SECURITY in your retirement which TWO of the following strategies would you choose to pursue now to prepare for it?

Social Components of Retirement Anxiety

The first outcome variable to be measured in the current study is retirement anxiety. Fletcher and O'Hansson initially developed the instrument used to measure this in 1991. The Social Components of Retirement Anxiety Scale (SCRAS) is a 23-item measure containing four factors: Social Integration and Identity, Social Adjustment/Hardiness, Anticipated Social Exclusion and Lost Friendships.

The SCRAS consists of a five point Likert scale from 1 Strongly Agree to 5 Strongly Disagree. The original study exhibited a Cronbach's α for the entire scale of .85. Cronbach's α for factor one "Social Integration and Identity" was .79; for factor two "Social Adjustment/Hardiness" .66; for factor three "Anticipated Social Exclusion" .67 and for factor four "Lost Friendships" was .62. Further studies exhibited similar reliability scores (see Lim and Fieldman, 2003 for example).

In the current study the scale was presented in a randomised fashion both in terms of its position in the overall questionnaire and in terms of the sequence of the items. The scale was introduced as follows:

This final section is about retirement. This time we are interested in your thoughts about the consequences of retiring. Please read each of the statements carefully and if you strongly agree with the statement please rate it a 1. If you strongly disagree with the statement then please rate it a 5. Try to avoid a 3 where possible.

In order to calculate the level of retirement anxiety for each participant the scores had to be initially reversed. This allowed for high scores to indicate high levels of anxiety and vice versa. The overall scale achieved a Cronbach's α of .89 in the present study. Details of the individual factors and their respective Cronbach's α are outlined in the results section below.

PANAS

The second and third outcome variables were measured by the Positive and Negative Affect Schedule (PANAS). This is a 20-item self-report measure of positive and negative affect developed by Watson, Clark, and Tellegen (1988b). Briefly, Positive Affect (PA) reflects the extent to which a person feels enthusiastic, active, and alert. High PA is a state of high energy, full concentration, and pleasurable engagement, whereas low PA is characterised by sadness and lethargy. In contrast, Negative Affect (NA) is a general dimension of subjective distress and un-pleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low NA being a state of calmness and serenity (Watson and Clark, 1988).

In the original development of the scale Watson and Clarke measured median varimax loadings for the PANAS terms on the two factors. All of the

descriptors had strong primary loadings (.50 and above) on the appropriate factor, and the secondary loadings were all acceptably low. Crawford and Henry (2004) evaluated the reliability and validity of the PANAS. Competing models of the latent structure of the PANAS were evaluated using confirmatory factor analysis. Regression and correlational analysis were used to determine the influence of demographic variables on PANAS scores as well as the relationship between the PANAS with measures of depression and anxiety (the HADS and the DASS). They concluded, “The PANAS is a reliable and valid measure of the constructs it was intended to assess.

In the current study the PANAS was administered with the following instructions:

I would like you to take a moment to reflect on the choices you just made with regards to strategies that you would choose to prepare for retirement. I would also ask you to think about the last time you thought about retirement and what it would mean to you. These thoughts probably give rise to feelings and emotions about how retirement will affect you. The following list contains words that describe a range of emotions and feelings. Please read each item and indicate to what extent you feel this way when you think about your impending retirement.

The list was presented and the respondent was asked to rate each item as “Very slightly or not at all; A Little; Moderately; Quite a bit; or Extremely”. This five-item scale achieved a Cronbach’s α of .93 for positive affect and .84 for negative affect in the present study.

Construal Level

As indicated in the literature review, construal level has been associated with regulatory focus. Also that the behavior identification form has been used

to study the relationship between abstraction and psychological distance (e.g., Fujita, Henderson, et al., 2006; Libby, Shaeffer, & Eibach, 2009; Liberman & Trope, 1998), decision making (e.g., Polman, 2012), social judgment (e.g., Luguri et al., 2012), and affect (e.g., Watkins, Moberly, & Moulds, 2011). In order to explore if there is an association between construal level and regulatory focus in the current research a measure of construal level was included. Construal level was assessed using the twenty-five item Behaviour Identification Form, which was administered in random order in the survey. Each item on the BIF presents an act identity followed by two alternative identities, one lower and one higher in level. Action identification theory (Vallacher & Wegner, 1989) holds that any action can be identified in many ways, ranging from low-level identities that specify how the action is performed to high-level identities that signify why or with what effect the action is performed. Individuals who identify action at a uniformly lower or higher level across many action domains, then, may be characterised in terms of their standing on a broad personality dimension: level of personal agency. The order that these items were presented in was randomised.

The BIF was introduced with the following text:

Any behaviour can be identified in many ways. For example, one person might describe a behaviour as "typing a paper," while another might describe the behaviour as "pushing keys. "Yet another person might describe the behaviour as "expressing thoughts. "We are interested in your personal preferences for how a number of different behaviours should be described. Below you will find several different behaviours listed.

After each behaviour will be two choices of different ways in which the behaviour might be identified. Here is an example:

Attending a class:

Identified as either (a) Sitting in a chair OR (b) looking at the blackboard

Your task is to choose the identification, a or b, that best describes the behaviour for you. Of course, there are no right or wrong answers. People simply differ in their preferences for the different behaviour descriptions, and we are interested in your personal preferences. Remember; choose the description that you personally believe is more appropriate in each pair.

Item-total correlations in the original scale ranged from .28 to .48, and the internal consistency (α) of the scale was .85. Subjects' level of personal agency was defined as the number of high-level alternatives chosen on the BIF (Vallacher & Wegner, 1989). This scale achieved a Cronbach's α of .80 in the present study.

8.3.6 Data Preparation

In order to prepare the data for analysis, a number of steps were carried out. Firstly the data was examined for any missing item or scale scores. Secondly, the data was screened for normality, errors, outliers or potential issues of multicollinearity. The data analysis strategy was designed beginning with an examination of the measurement model and followed by an assessment of the structural model.

8.3.7 Missing Data

As detailed in the methodology section in Study 2, missing data does not only exist at participant level but also at item and survey level. Screening of data in the survey for Study 3 was carried out at item, survey and participant

level. SPSS was the statistical tool utilised once again to analyse the data for the current study and the various techniques available within SPSS were availed of to screen the data. In the initial examination of the current survey, there was a significant level of missing data at the survey level and it was difficult to establish the true nature of the missing data at item level, until this was investigated further. The first issue discovered was that 63 of the 388 participants did not venture past the first question asking them if they wanted to participate in the survey. Although they clicked 'yes' they did not proceed any further. An examination of these cases failed to find any pattern in terms of date of participation or sequence of participation. These could therefore be classified as MCAR. A further 8 participants clicked 'no' and exited the survey. Again these appeared to be completely at random. Once these were removed the balance of the responses were further examined for missing data at scale and item level. Another twenty cases were missing complete scales for at least two variables. These were subsequently removed. Another five were missing one complete scale. Again there was no pattern identifiable as it was not the same scale in each case. Once removed, the final 294 responses exhibited less than 0.8 percent incompleteness at item level. These items were examined and 24 items for 8 respondents who had data that fell into the MAR category scores were replaced at the mean value for the item.

8.3.8 Data Screening

Frequencies and descriptive statistics for all study variables were carefully examined to examine the distribution of responses and the characteristics of the sample. Means, medians, standard deviations, and minimum and maximum scores were generated for each variable to ensure that all values were plausible and within the expected range (Tabachnick & Fidell,

2007). Examining these descriptive statistics also provided a check for minor errors in data entry.

To check for multicollinearity, a correlation (Table 8.10 page 209) was developed for all variables in the current study. Multicollinearity describes a situation where variables in a study are very highly correlated to the point that they pose a threat to the validity of the data analysis. A range of thresholds have been proposed as an appropriate cut off point for multicollinear variables from .75 (Ashford & Tsui, 1991) to .90 (Saunders, et al., 2009). Examination of the correlation (Fig 8.10) for variables in this study indicates that there are no correlations above .45. Therefore, it was determined that multicollinearity does not appear to be a significant issue in this research.

8.3.9 Data Analysis Strategy

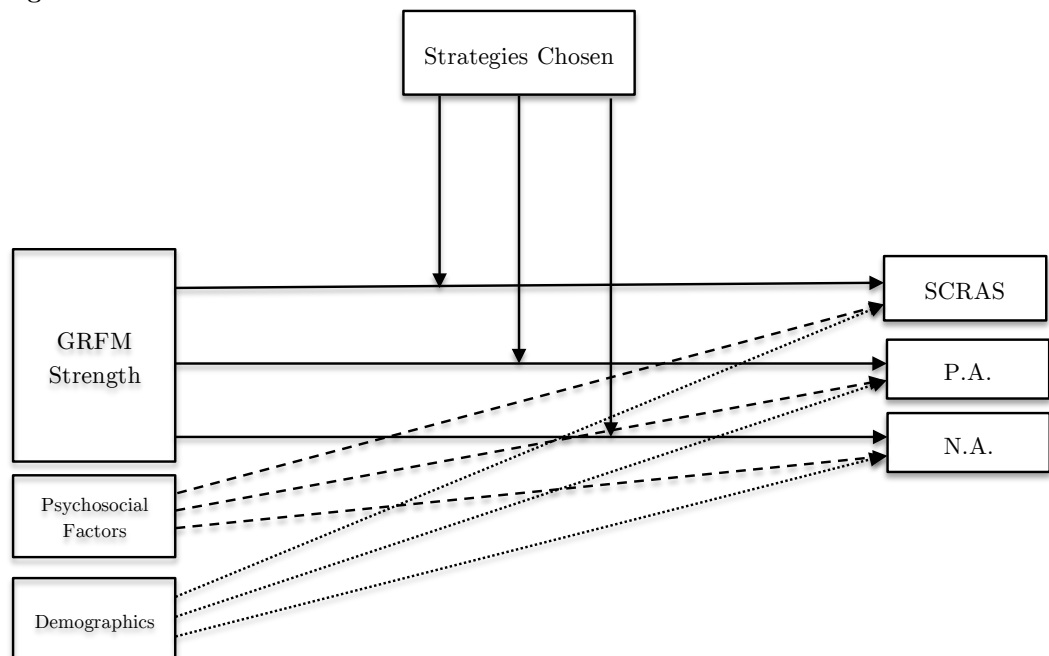
The data analysis strategy employed in Study 3 is the same as that employed in study 2 involving two stages. Firstly, the measurement model specified in the study will be inspected to confirm the factor structure, the internal consistency of each measure and to examine the descriptive statistics and the relationships between study variables. Secondly, the analysis will focus on the structural model (Figure 8.2) and the testing of the study hypotheses.

As stated in Study 2, factor analysis is a method of representing the inter-relationships between large numbers of observed variables (e.g., items in a questionnaire) with a smaller number of latent variables (Bollen, 1989). As there were three instruments containing scaled items utilised in Study 3, an exploratory factor analysis was initially employed to test the independence of the three measurements. As in Study 2, Chronic Regulatory Focus Measure Strength, the independent variable in the current study, is theorised as having a two-factor structure. The first of the dependent variables for the current study

is the Social Components of Retirement Anxiety Scale (SCRAS). SCRAS is theorised as having a four-factor structure. The positive affect, negative affect scale measures the other dependent variables in the current study. This measure is theorised as having a two-factor structure. Each of these measurements, once confirmed are explored in more detail individually.

Prior to performing the Principal Component Analysis (PCA) the suitability of the data for factor analysis is assessed. A correlation matrix is created and inspected. Tabachnick and Fidell (2001) recommend coefficients above 0.3. The Kaiser-Meyer-Okin value (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) are checked for significance. The Bartlett's Test of Sphericity should be significant ($p < .05$) for factor analysis to be considered appropriate. The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis (Tabachnick & Fidell, 2001). PCA is then carried out using Varimax rotation (Thurstone, 1947).

Figure 8.2 Structural Model



Solid lines represent interactions between main model variables.

Dashed lines represent interactions between psychosocial control variables and dependent variables.

Dotted lines represent interactions between demographic control variables and dependent variables.

As stated above, Chronic Regulatory Focus Measure, the first of the independent variables in the current study, is theorised as having a two-factor structure. In order to confirm this (i.e. chronic promotion focus and chronic prevention focus) for the measurement model, an exploratory factor analysis is carried out.

The other independent variable is the type of strategies chosen. The relationship between GRFM strength and the strategies chosen is firstly explored and validated. The current research then contends that the type of strategies chosen will moderate the relationship between GRFM strength and the DVs in the current study. This is tested after the next step is carried out.

The dependent variable for the current study is the Social Components of Retirement Anxiety Scale (SCRAS). SCRAS is theorised as having a four-factor structure. In order to confirm this (i.e. Social Integration & Identity; Social Adjustment/Hardiness; Anticipated Social Exclusion and Lost Friendships) for the measurement model an exploratory factor analysis is carried out. The possible mediating effect of the BIF between GRFM Strength and SCRAS is then tested.

The positive affect, negative affect scale measures the other dependent variables in the current study. This measure is theorised as having a two-factor structure. In order to confirm this (i.e. positive affect, PA and negative affect, NA) for the measurement model an exploratory factor analysis is carried out. The moderating effect of the strategies chosen on the relationship between GRFM strength and the DVs of SCRAS, PA and NA are the final steps in Study 3.

8.3.10 Results Final Study

Exploratory Factor Analysis of main measurements.

To investigate the measurement model, the 61 items of the GRFM, PANAS and SCRAS were subjected to principle component analysis (PCA). Using SPSS Version 21. Prior to performing the PCA the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Okin value was .82, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($p = .000$) supporting the factorability of the correlation matrix.

Principle components analysis revealed the presence of thirteen components with eigenvalues exceeding 1, explaining 64.65 percent of the variances respectively. An inspection of the screeplot revealed a break after the eight component. Using Catell's (1966) scree test, it was decided to retain eight components for further investigation. This was further supported by the results of Parallel Analysis, which showed only eight components with eigen values exceeding the corresponding criterion values for a randomly generated data matrix of the same sample size (61 variables X 294 respondents).

To aid in the interpretation of these eight components, Varimax rotation was performed. The rotated solution revealed the presence of a structure similar to that theorised by the original measurement developers, with all components showing a number of strong loadings and the eight component solution explained 54.67 percent of the variance. However, there were some anomalies found with the factor structure, as can be seen from Table 8.3 below. For example, the first item of the GRFM scale loaded more strongly on the opposite

factor than that theorised. To explore these anomalies further, the individual scales were examined independently.

General Regulatory Focus Measure (GRFM)

The measurement used for Chronic Regulatory Focus was the “General Regulatory Focus measure” (GRFM) (Lockwood, et al., 2002). Identified as one of the most popular measures of regulatory focus (Gorman, et al., 2012) in 30 studies it was shown to have mean internal consistency estimate (Cronbach’s α) of .82 for promotion focus compared to the “Regulatory Focus Questionnaire” (RFQ) (Higgins et al., 2001), which had a mean α for promotion focus of .70. For prevention focus the mean α for the GRFM was .82 and the mean α for the RFQ was .80. In the current study the α for the promotion scale is .84 and the α for the prevention scale is .84.

To further investigate the 18 items of the GRFM were subjected to principle component analysis (PCA). Using SPSS Version 21. Prior to performing the PCA the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .87, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett’s Test of Sphericity (Bartlett, 1954) reached statistical significance (p. 000) supporting the factorability of the correlation matrix.

Table 8-3 Exploratory Factor Analysis for Major Scale Items in Study 3

Item Factor Loadings								
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Item	1	2	3	4	5	6	7	8
In general, I am focused on preventing negative events in my life.	0.00	0.45	-0.09	0.20	0.19	-0.05	0.19	0.09
I am anxious that I will fall short of my responsibilities and obligations.	-0.11	0.15	-0.01	0.70	0.02	0.06	0.04	-0.01
I often think about the person I am afraid I might become in the future.	-0.07	0.09	0.13	0.68	0.08	0.15	0.03	0.01
I often worry that I will fail to accomplish my goals.	-0.01	0.16	0.12	0.77	0.06	0.08	0.06	-0.10
I often imagine myself experiencing bad things that I fear might happen to me.	-0.06	0.01	0.06	0.65	0.12	0.19	0.08	0.06
I frequently think about how I can prevent failures in my life.	-0.04	0.28	-0.05	0.57	0.05	0.01	0.09	0.00
I am more oriented toward preventing losses than I am toward achieving gains.	-0.05	0.02	-0.05	0.57	0.09	-0.15	0.00	0.14
My major goal right now is to avoid becoming a failure.	-0.02	0.06	0.06	0.75	-0.03	0.08	-0.01	0.00
I see myself as someone who is primarily striving to become the self I “ought” to be to fulfill my duties, responsibilities, and obligations.	0.08	0.26	-0.03	0.53	-0.06	0.23	-0.05	0.08
I frequently imagine how I will achieve my hopes and aspirations.	0.06	0.73	-0.03	0.20	-0.01	0.05	-0.04	-0.02
I often think about the person I would ideally like to be in the future.	0.11	0.41	0.09	0.44	-0.01	0.08	-0.04	-0.23
I typically focus on the success I hope to achieve in the future.	0.07	0.80	-0.01	0.12	0.02	0.04	-0.04	-0.15
I often think about how I will achieve success.	0.11	0.73	-0.05	0.15	0.01	0.04	0.00	-0.10
My major goal right now is to achieve my lifelong ambitions.	0.07	0.69	-0.01	0.12	-0.01	-0.03	-0.01	-0.05
I see myself as someone who is primarily striving to reach my “ideal self”—to fulfill my hopes, wishes, and aspirations.	0.05	0.67	-0.06	0.21	-0.02	-0.01	0.07	-0.06
In general, I am focused on achieving positive outcomes in my life.	0.14	0.54	-0.28	-0.11	-0.06	-0.12	0.08	0.22
I often imagine myself experiencing good things that I hope will happen to me.	0.09	0.47	0.05	0.25	-0.20	0.05	-0.13	0.09
Overall, I am more oriented toward achieving success than preventing failure.	-0.10	0.68	-0.17	-0.09	-0.15	0.01	-0.06	-0.07
Interested	0.78	0.03	-0.09	-0.07	-0.14	-0.03	-0.05	-0.06
Excited	0.79	0.02	-0.07	-0.03	-0.23	-0.02	-0.06	-0.02
Strong	0.76	0.07	-0.06	0.00	-0.08	-0.10	-0.10	-0.06
Enthusiastic	0.74	-0.04	-0.09	-0.05	-0.08	0.06	-0.39	-0.10
Proud	0.70	0.05	-0.08	-0.10	-0.02	-0.11	0.23	-0.13
Inspired	0.79	0.07	-0.05	0.00	-0.17	-0.16	0.10	-0.13
Determined	0.73	0.07	-0.08	0.01	-0.01	0.03	-0.42	-0.10
Active	0.73	0.11	-0.12	-0.05	-0.13	-0.08	-0.08	-0.09
Alert	0.76	0.13	-0.06	-0.02	-0.11	-0.05	0.11	0.03
Attentive	0.69	0.05	-0.09	0.02	-0.02	0.05	-0.50	-0.05

Distressed	-0.05	-0.01	0.06	0.08	0.10	0.74	0.07	0.03
Upset	-0.11	0.02	0.19	0.06	0.09	0.61	0.51	-0.01
Guilty	-0.04	0.03	0.02	0.05	0.05	0.13	0.81	-0.04
Scared	-0.09	-0.01	0.03	0.12	0.19	0.71	0.17	0.07
Hostile	-0.12	0.03	0.02	0.04	-0.01	0.01	0.83	0.01
Irritable	0.02	0.03	0.14	0.16	0.03	0.67	0.23	-0.10
Ashamed	-0.01	-0.09	0.11	-0.07	0.09	0.53	0.46	-0.03
Nervous	-0.09	0.03	0.01	0.17	0.16	0.71	-0.08	0.16
Jittery	-0.12	-0.03	-0.03	0.12	0.03	0.27	0.74	0.06
Afraid	-0.14	0.05	0.01	0.16	0.11	0.69	-0.05	0.12
I can't imagine not working.	-0.38	0.15	0.43	-0.05	0.36	0.16	-0.02	-0.13
After retirement, I am not sure I will know how to stay involved.	-0.27	-0.01	0.44	0.00	0.43	0.11	0.03	0.03
There really isn't much for a retired person to do.	-0.20	-0.12	0.69	-0.01	0.16	-0.04	-0.05	0.20
I am afraid I will be a burden on my family as a retired person.	-0.06	-0.05	0.71	0.13	0.20	0.09	0.10	0.09
I worry that my family will not support me after I retire.	-0.04	-0.04	0.75	0.08	0.21	0.10	0.12	-0.05
I will probably be sitting around alone after I retire.	-0.10	-0.15	0.76	0.06	0.22	0.07	0.03	0.19
My family does not want me to retire.	-0.07	-0.11	0.59	0.05	0.08	0.03	-0.03	-0.14
My job has always been a source of my identity. I hate to lose that.	-0.34	0.13	0.32	0.03	0.45	0.25	0.08	-0.16
I am afraid I will feel lonely after I retire.	-0.25	-0.02	0.40	0.14	0.52	0.22	0.07	0.12
It will be hard to replace my friends from work.	-0.11	0.03	0.21	-0.10	0.54	0.15	0.02	0.15
I don't know what I am going to do without my job.	-0.34	0.00	0.10	0.04	0.54	0.25	-0.01	0.05
I am afraid I will lose all my work friends as a retired person.	-0.13	0.03	0.18	-0.02	0.67	0.22	0.01	0.11
I am too old to make new friends.	-0.09	-0.15	0.04	0.14	0.50	0.09	0.04	0.23
Keeping up with my friends will be difficult.	-0.08	-0.06	0.18	0.03	0.55	0.17	0.12	0.25
Many of my colleagues will not have time for me after I retire.	-0.06	-0.04	0.17	0.14	0.66	0.00	0.07	-0.06
I won't have much in common with my co-workers anymore.	-0.15	-0.05	-0.04	0.04	0.63	-0.05	-0.05	-0.06
People will never call on me to do things with them after I retire.	0.07	-0.03	0.39	0.05	0.57	0.04	-0.05	0.11
I have already made plans for what I am going to do as soon as I retire.	-0.40	-0.06	0.11	0.02	0.16	0.19	0.04	0.36
Most of my friends have been my co-workers.	-0.12	0.00	0.28	-0.12	0.13	0.32	-0.05	0.12
Retirement will allow me to do things with friends that I wasn't able to do while I was working.	-0.03	-0.14	0.48	-0.06	-0.05	0.12	0.05	0.55
Retirement will give me new opportunities to make new friends.	-0.14	-0.11	0.51	-0.05	0.10	0.03	-0.07	0.60
I have lots of friends I can depend on if I need them after I retire.	-0.16	-0.03	-0.06	0.11	0.20	0.25	0.01	0.56
Retirement will not bother me because I am sure I can make new friends no matter where I go.	-0.22	-0.05	0.04	0.06	0.19	-0.02	0.02	0.63
Eigen Values	11.24	6.15	4.17	3.37	2.54	2.35	1.83	1.69
% of variance	18.42	10.09	6.84	5.52	4.18	3.85	3.01	2.77
	0.93	0.84	0.83	0.84	0.84	0.85	0.82	0.68

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.a Rotation converged in 7 iterations.

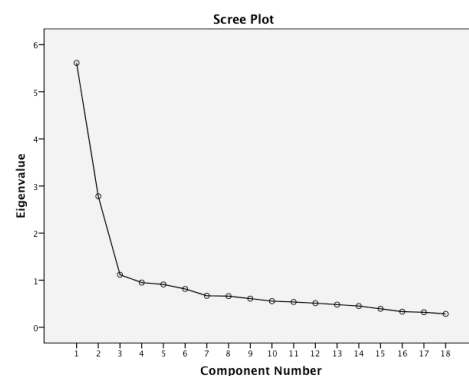


Figure 8.3 Scree Plot for GRFM Study 3

Principle components analysis revealed the presence of three components with eigenvalues exceeding 1, explaining 31.18 percent, 15.46 percent and 6.20 percent of the variances respectively. An inspection of the screeplot (see Fig 8.3) revealed a clear break after the second component. Using Catell's (1966) scree test, it was decided to retain two components for further investigation. This was further supported by the results of Parallel Analysis, which showed only two components with eigen values exceeding the corresponding criterion values for a randomly generated data matrix of the same sample size (18 variables X 294 respondents).

To aid in the interpretation of these two components, Varimax rotation was performed. The rotated solution revealed the presence of simple structure (Thurstone, 1947), with both components showing a number of strong loadings and the two component solution explained 46.63 percent of the variance. It did, however, also reveal that one item loaded onto the opposite component to the one that the scale authors predicted (RF 1) and one item cross-loaded onto the two components (RF 5). Removing these items results in an increase in the percentage of variance explained from 46.63 percent to 49.10 percent. The final set of items used and their individual factor loadings can be seen in Table 8.4.

Table 8-4 Item Factor Loadings for GRFM

Item Means and Standard Deviations and Item Factor loadings on the General Regulatory Focus Measure

	Item Factor Loadings	
	Factor 1	Factor 2
I frequently imagine how I will achieve my hopes and aspirations.	0.74	0.20
I typically focus on the success I hope to achieve in the future.	0.81	0.14
I often think about how I will achieve success.	0.74	0.16
My major goal right now is to achieve my lifelong ambitions.	0.69	0.12
I see myself as someone who is primarily striving to reach my "ideal self"—to fulfil my hopes, wishes, and aspirations.	0.70	0.21
In general, I am focused on achieving positive outcomes in my life.	0.55	-0.12
I often imagine myself experiencing good things that I hope will happen to me.	0.46	0.24
Overall, I am more oriented toward achieving success than preventing failure.	0.71	-0.08
I am anxious that I will fall short of my responsibilities and obligations.	0.15	0.71
I often think about the person I am afraid I might become in the future.	0.04	0.72
I often worry that I will fail to accomplish my goals.	0.15	0.79
I often imagine myself experiencing bad things that I fear might happen to me.	-0.03	0.71
I frequently think about how I can prevent failures in my life.	0.27	0.58
I am more oriented toward preventing losses than I am toward achieving gains.	-0.01	0.57
My major goal right now is to avoid becoming a failure.	0.06	0.76
I see myself as someone who is primarily striving to become the self I "ought" to be to fulfil my duties, responsibilities, and obligations.	0.28	0.55

Note: Boldfaced factor loadings indicate item-factor designations

Social Components of Retirement Anxiety

The Social Components of Retirement Anxiety Scale (SCRAS) is a 23-item measure containing four factors: Social Integration and Identity, Social Adjustment/Hardiness, Anticipated Social Exclusion and Lost Friendships (Fletcher and O'Hansson, 1991). The SCRAS is initially subjected to an exploratory factor analysis to confirm its theorised one-dimension structure.

Prior to performing the PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Okin value was .89, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance (p. 000) supporting the factorability of the correlation matrix.

A principal component analysis revealed the existence of one primary factor with an eigen value of 7.2 and four minor factors with eigen values of 2.0; 1.67; 1.48; 1.12 respectively. It was decided to run a Monte-Carlo Parallel Analysis. Parallel analysis is a method for determining the number of components to retain from the PCA by creating a random dataset with the same number of observations and variables as the original study. The Monte-Carlo PA is a computer programme designed by Watkins (2000). Results from the parallel analysis showed that the first four factors exceeded the corresponding criterion values for a randomly generated data matrix of the same sample size (23 variables X 294 respondents). These explained a total of 54.12% of the variance and were retained. A varimax rotation failed to provide an alternative solution in 25 iterations, confirming that the SCRAS is indeed a four dimensional scale. Loadings for the items, however, did not reflect the original factor items suggested by Fletcher and O'Hansson (1991). An examination of the rotated component matrix revealed a slightly different structure. This structure still contained four factors but in this study, factor one contained eight items, factor two seven items, factor three six items and factor four just two items. The means, standard deviations and chronbach alphas for four factors in the current scale are given in Table 8.5 below. Individual item factor loadings can be seen in Table 8.6.

Table 8-5 SCRAS Factor Inter-correlation and Cronbach Alphas'

Measure	No. Items	% Variance	M	SD	Alpha	Factor Intercorrelation			
						1	2	3	4
Entire Scale	23				0.89	0.82	0.87	0.71	0.48
Factor									
1. Social Integration	7	30.81	13.58	5.55	0.84	—	0.52	0.46	0.29
2. Social Adjustment	8	39.82	18.35	6.31	0.83		—	0.57	0.32
3. Social Exclusion	6	20.2	13.98	4.5	0.77			—	0.33
4. Social Hardiness	2	4.29	2.95	1.72	0.55				—

The SCRAS consists of a five point Likert scale from 1 Strongly Agree to 5 Strongly Disagree. The current study exhibited a Cronbach's α for the entire scale of .89. Cronbach's α for factor one "Social Integration" was .84; for factor two "Social Adjustment" .83; for factor three "Social Exclusion" .77 and for factor four "Hardiness" was .55.

Table 8-6 Item Factor Loadings for SCRAS

Item	Item Factor Loadings			
	Factor 1	Factor 2	Factor 3	Factor 4
I can't imagine not working.	0.26	0.73	0.10	-0.08
My job has always been a source of my identity. I hate to lose that.	0.17	0.74	0.22	-0.08
I am afraid I will feel lonely after I retire.	0.29	0.64	0.30	0.24
After retirement, I am not sure I will know how to stay involved.	0.36	0.55	0.23	0.10
I don't know what I am going to do without my job.	-0.04	0.69	0.29	0.21
I have already made plans for what I am going to do as soon as I retire.	0.04	0.50	-0.05	0.50
It will be hard to replace my friends from work.	0.14	0.54	0.25	0.15
Most of my friends have been my co-workers.	0.18	0.51	-0.15	0.13
There really isn't much for a retired person to do.	0.72	0.21	0.08	0.17
I am afraid I will be a burden on my family as a retired person.	0.71	0.22	0.19	0.02
I worry that my family will not support me after I retire.	0.73	0.24	0.19	-0.09
I will probably be sitting around alone after I retire.	0.77	0.24	0.16	0.18
Retirement will allow me to do things with friends that I wasn't able to do while I was working.	0.58	-0.01	-0.08	0.49
My family does not want me to retire.	0.59	0.09	0.15	-0.10
Retirement will give me new opportunities to make new friends.	0.59	0.10	0.02	0.54
I am afraid I will lose all my work friends as a retired person.	0.15	0.43	0.55	0.17
I am too old to make new friends.	0.04	0.20	0.47	0.38
Individuals will never call on me to do things with them after I retire.	0.40	0.20	0.52	0.07
Keeping up with my friends will be difficult.	0.24	0.25	0.51	0.24
Many of my colleagues will not have time for me after I retire.	0.20	0.14	0.73	0.01
I won't have much in common with my co-workers anymore.	0.03	0.01	0.77	0.01
Retirement will not bother me because I am sure I can make new friends no matter where I go.	0.09	0.05	0.14	0.71
I have lots of friends I can depend on if I need them after I retire.	-0.04	0.12	0.17	0.70
Eigen Values	7.26	2.01	1.70	1.48
% of variance	31.57	8.74	6.43	4.87
α	.82	.87	.71	.48

PANAS

The Positive and Negative Affect Schedule (PANAS) is a 20-item self-report measure of positive and negative affect developed by Watson, et al., (1988b). The items were all adjectives but half were positive items and half were negative items. Respondents had to rate each item as to how they thought it reflected their feelings about their impending retirement. A five point Likert scale was used and ranged from 1 Very Slightly or not at all to 5 Extremely.

Prior to performing the PCA the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Okin value was .9, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance (p. 000) supporting the factorability of the correlation matrix.

A principal component analysis revealed the existence of two primary factors with eigen values of 6.88 and 3.62, with one minor factor (eigen value = 2.34). The two primary factors cumulatively explain 52.45% of the variance. A varimax rotation failed to provide an alternative solution in 25 iterations, confirming that the PANAS is indeed a two-dimensional scale. Loadings for the Positive Affect items ranged from 0.69 to 0.81 and for Negative Affect items from 0.49 to .81. Individual factor loadings can be seen in Table 8.7 below.

Table 8-7 Item Factor Loading for PANAS

Item	Item Factor Loadings	
	Factor 1	Factor 2
Interested	0.80	-0.09
Distressed	-0.03	0.66
Excited	0.81	-0.08
Upset	-0.13	0.81
Strong	0.77	-0.12
Guilty	-0.11	0.57
Scared	-0.09	0.72
Hostile	-0.19	0.49
Enthusiastic	0.79	-0.19
Proud	0.69	0.02
Irritable	0.04	0.70
Alert	0.77	0.02
Ashamed	-0.03	0.69
Inspired	0.79	-0.09
Nervous	-0.07	0.58
Determined	0.78	-0.21
Attentive	0.74	-0.23
Jittery	-0.18	0.66
Active	0.76	-0.12
Afraid	-0.10	0.58
Eigenvalues	6.87	3.62
% of variance	34.35	18.11
α	.93	.84

Demographics

A number of demographic variables were included in the final study including Gender, Age, Marital Status, Education, Household income, Tenure, Retirement Age, and Time to retirement. The relationships between these variables and the dependent variables were tested and the following results were obtained.

Gender

An independent sample t-test was conducted to compare the pre-retirement anxiety scores (measured by the Social Components of Retirement Anxiety, SCRAS) for males and females. There was no significant difference in scores for males ($M= 50.95$, $SD = 14.08$) and females [$M= 50.10$, $SD= 13.23$; $t(292) = .50$, $p= .28$]

An independent sample t-test was also conducted to compare the positive affect (PA) and negative affect scores (NA), (Measured by the Positive Affect Negative Affect Schedule, PANAS) for males and females. There was no significant difference in the positive affect scores for males ($M= 34.73$, $SD = 9.19$) and females [$M= 35.37$, $SD= 8.95$; $t(292) = -.58$, $p= .93$]

There was also no significant difference in the negative affect scores for males ($M= 15.15$, $SD = 5.52$) and females [$M= 14.72$, $SD= 5.15$; $t(292) = .68$, $p= .52$]

Age

The relationship between age (measured by combining age in years and age in months to compute new variable age Total Age) and pre-retirement anxiety (measured by the Social Components of Retirement Anxiety, SCRAS), positive affect and negative affect (Measured by the Positive Affect Negative Affect Schedule, PANAS) was investigated using Pearson product-moment correlation coefficient. There was no significant correlation between total age and SCRAS [$r= .02$, $n= 294$, $p= .69$] or between total age and positive affect (PA) [$r= -.01$, $n= 294$, $p= .88$]. However there was a significant correlation

between total age and negative affect such that the older the individual the greater the negative affect reported (NA), [$r = .17$, $n = 294$ $p < .01$]

Marital status

A one-way between-groups analysis of variance was conducted to explore the impact of marital status on levels of pre-retirement anxiety (measured by SCRAS), positive affect (PA) and negative affect (NA). Participants were divided into five groups according to their reported marital status (Group 1: Married/Partnered (spouse/partner working); Group 2: Married/Partnered (spouse/partner not working); Group 3: Divorced/Separated; Group 4: Unmarried; Group 5: Widowed). There was no significant difference in the SCRAS scores for the five groups [$F(4, 283) = 1.19$, $p = .31$].

There was also no significant difference in the PA scores for the five groups [$F(4, 283) = .34$, $p = .85$]. Finally, there was no significant difference in the NA scores for the five groups [$F(4, 283) = .19$, $p = .94$].

Education

A one-way between-groups analysis of variance was conducted to explore the impact of education on levels of pre-retirement anxiety (measured by SCRAS), positive affect (PA) and negative affect (NA). Participants were divided into eight groups according to their reported education attainment (Group 1: Did not complete any formal education; Group 2: Intermediate/Junior Certificate; Group 3: Leaving Certificate/A Level; Group 4: Post Leaving Certificate; Group 5: Diploma; Group 6: Undergraduate Degree; Group 7: Postgraduate Degree; Group 8: PhD). There was no significant

difference in the SCRAS scores for the eight groups [$F(7, 286) = 1.19, p = .31$]. There was no significant difference in the PA scores for the eight groups [$F(7, 286) = 1.90, p = .99$]. There was also no significant difference in the NA scores for the eight groups [$F(7, 286) = 1.44, p = .19$].

Household Income

A one-way between-groups analysis of variance was conducted to explore the impact of household income on levels of pre-retirement anxiety (measured by SCRAS), positive affect (PA) and negative affect (NA). Participants were divided into six groups according to their reported household income (Group 1: 0 to 20,000 per annum; Group 2: 21,000 to 40,000 per annum; Group 3: 41,000 to 60,000 per annum; Group 4: 61,000 to 80,000 per annum; Group 5: 81,000 to 100,000 per annum; Group 6: Over 100,000 per annum). There was no significant difference in the SCRAS scores for the six groups [$F(6, 287) = .29, p = .94$].

There was also no significant difference in the PA scores for the six groups [$F(6, 287) = .43, p = .86$]. Finally, there was a significant difference in the NA scores for the six groups [$F(6, 286) = 2.81, p = .01$]. The effect size, calculated using eta squared was .06. Comparing the mean scores show that one group, group 2, had a mean score of 25.33 (SD 13.8) compared to the other groups which had mean scores and SD of 13.55 (SD 3.63); 14.78 (SD 4.7); 15.13 (SD 4.46); 15.60 (SD 7.04); 13.92 (SD 5.18); 14.86 (SD 5.27) respectively. Only one participant indicated a household income of less than 20,000 (Group 1).

Tenure, Retirement Age and Time to Retirement.

The relationship between tenure (measured by single item); Retirement age (measured by single item); time to retirement (measured by subtracting Total Age from Retirement Age to compute new variable Time to Retirement) and pre-retirement anxiety (measured by the Social Components of Retirement Anxiety, SCRAS), positive affect and negative affect (Measured by the Positive Affect Negative Affect Schedule, PANAS) was investigated using Pearson product-moment correlation coefficient.

There was no significant correlation between tenure and SCRAS [$r = .07$, $n = 294$, $p = .21$] or between retirement age and SCRAS [$r = .07$, $n = 294$, $p = .25$]. Also there was no significant correlation between time to retirement and SCRAS, [$r = .05$, $n = 294$, $p = .43$].

There was no significant correlation between tenure and PA [$r = .07$, $n = 294$, $p = .21$] or between retirement age and PA [$r = -.06$, $n = 294$, $p = .31$]. Also there was no significant correlation between time to retirement and PA, [$r = -.06$, $n = 294$, $p = .31$].

There was no significant correlation between tenure and NA [$r = -.01$, $n = 294$, $p = .85$]. There was a significant correlation between retirement age and NA [$r = .13$, $n = 294$, $p < .05$]. Also there was a significant correlation between time to retirement and NA, [$r = -.28$, $n = 294$, $p < .01$].

Control Variables.

Finally a number of short scales were used to measure for control variables of Self-reported satisfaction with health, satisfaction with life and work satisfaction. The relationship between satisfaction with health (SWH, measured by four items); Satisfaction with life (SWL measured by five items); work satisfaction (WS, measured by three items) and pre-retirement anxiety (measured by the Social Components of Retirement Anxiety, SCRAS) , positive affect and negative affect (Measured by the Positive Affect Negative Affect Schedule, PANAS) was investigated using Pearson product-moment correlation coefficient.

There was a significant correlation between SWH and SCRAS [$r = -.16$, $n = 294$, $p < .01$] and between SWL and SCRAS [$r = -.27$, $n = 294$, $p < .01$]. Also there was a significant correlation between WS and SCRAS, [$r = .13$, $n = 294$, $p < .05$].

There was no significant correlation between SWH and PA [$r = .03$, $n = 294$, $p = .66$]. However there was a significant correlation between SWL and PA [$r = .24$, $n = 294$, $p < .01$]. Also there was a significant correlation between WS and PA, [$r = -.19$, $n = 294$, $p < .01$].

There was no significant correlation between SWH and NA [$r = -.09$, $n = 294$, $p = .13$]. However there was a significant correlation between SWL and NA [$r = -.31$, $n = 294$, $p < .01$]. Also there was no significant correlation between WS and NA, [$r = -.08$, $n = 294$, $p = .16$].

The final test in this section was conducted to see if there was any relationship between the control variables and anticipated retirement age and/or time to retirement. Of the three, the only variable to show a significant correlation was work satisfaction with anticipated retirement age [$r = -.11$, $n = 294$, $p < .05$].

Construal Level

In addition to the tests carried out in Study 3 this research thesis also explored the relationship between construal level and regulatory focus. The individual differences in action identification level are used to assess construal level in the current study. The twenty five item Behaviour Identification Form (Vallacher & Wegner, 1989) is initially subjected to an exploratory factor analysis to confirm its theorised one-dimension structure. Prior to performing the PCA the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the absence of many coefficients of .3 and above. While the Kaiser-Meyer-Okin value was .77, exceeding the recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance (p . 000) supporting the factorability of the correlation matrix the lack of correlations points to possible issues.

A principal component analysis revealed the existence of one primary factor with an eigenvalue of 4.4 and eight minor factors with eigenvalues between 1.0 to 1.8. Items loaded onto the primary factor with loadings ranging between .12 to .6 and a Cronbach alpha of .80 for the entire scale. Examining the scree plot would indicate that there is a clear single factor in play. However, a Monte Carlo PCA showed that there were six factors (explaining 46.8% of the variance) that exceed the corresponding criterion values for a randomly generated data matrix of the same sample size (25 variables X 294 respondents). Running an extraction of these six factors reveals the factor loadings shown in Table 10.5. Close examination of these factor loadings shows some variations across factors. However some cross loadings are only separated by very small amounts. The second item for example (reading) loads on the primary factor at 0.37 and on factor 2 at 0.38. Retaining this on factor 1 leaves only one item on

factor 2, “Paying the rent”. Similarly there was only one item on factor 6, “Taking a test”. Factor 3 and 4 had two items each and Factor 5 had no item with a higher loading than on the other factors.

These results are discussed below but as they were in line with the original study the scale was as accepted as a one-dimensional scale and all items were retained for further cautious analysis.

Table 8-8 Item Factor Loadings for BIF Six Components Extracted

	Item Factor Loadings					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Making a list	0.31	0.07	0.03	0.12	0.18	0.41
Reading	0.37	0.38	-0.25	-0.03	0.07	-0.24
Joining the Army	0.50	-0.11	-0.23	-0.44	-0.05	-0.01
Washing clothes	0.45	-0.38	-0.13	0.04	0.32	-0.18
Picking an apple	0.42	-0.17	0.12	-0.21	0.39	-0.24
Chopping down a tree	0.28	-0.01	0.37	-0.55	-0.18	0.27
Measuring a room for carpeting	0.53	-0.02	-0.18	0.14	0.15	-0.11
Cleaning the house	0.43	-0.21	-0.14	0.03	0.28	0.06
Painting a room	0.29	0.34	0.46	0.08	0.22	0.07
Paying the rent	0.23	0.69	-0.05	-0.06	0.20	0.07
Caring for house plants	0.43	-0.32	0.33	0.11	-0.07	0.10
Locking a door	0.35	0.12	0.23	0.40	0.33	0.14
Voting	0.47	0.18	-0.30	0.18	-0.08	-0.15
Climbing a tree	0.60	-0.19	0.01	-0.20	-0.10	-0.31
Filling out a personality test	0.46	0.29	-0.23	0.03	-0.39	0.09
Tooth brushing	0.46	0.35	0.14	-0.33	0.16	0.05
Taking a test	0.42	0.14	-0.33	0.12	-0.32	0.44
Greeting someone	0.50	0.02	0.22	0.25	-0.45	-0.24
Resisting temptation	0.49	-0.34	-0.27	0.05	-0.13	0.12
Eating	0.55	0.30	-0.01	-0.24	-0.03	-0.06
Growing a garden	0.42	-0.42	0.33	-0.14	-0.11	0.29
Traveling by car	0.12	0.18	0.52	0.02	-0.21	-0.33
Preventing a cavity	0.35	-0.09	-0.02	0.21	0.18	0.27
Talking to a child	0.42	-0.20	-0.09	0.13	-0.04	-0.22
Pushing a doorbell	0.35	0.05	0.28	0.51	-0.14	-0.05
Eigenvalues	4.44	1.84	1.60	1.42	1.26	1.16
% of variance	17.80	7.38	6.32	5.67	5.00	4.64
α	.78	.37	.38	-.003	0	0

8.3.11 Hypothesis Testing:

Study 2 in the current research tested the set of retirement preparation strategies developed in Study 1 to determine if they were distinguishable as eager approach and vigilant avoidance type strategies. The approach used in the original study by Higgins et al (1994) was followed initially. Participants chronic regulatory focus grouping was assigned by subtracting their prevention score from their promotion score and then by use of a median split they were assigned as either promotion-focused group or prevention-focused group (IV). A test of between groups was then conducted to compare the type of strategies preferred by either group. These were Promotion Eager Approach Strategies and Prevention Vigilant Avoidance Strategies (DV). While the Study 3 was interested in the relationship between GRFM strength and the type of strategies chosen it was believed prudent to repeat the process in Study 2 and the Higgins study of 1997 with the new sample.

Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. There was a statistically significant difference between chronic promotion focus individuals and chronic prevention focused individuals on the type of strategies chosen: $F(1, 292) = 12.5, p=.000$; Wilks' Lambda = .96; partial eta squared= .04. An inspection of the mean scores indicated that Chronic Promotion Focused individuals chose slightly more promotion type strategies ($M=6.02, SD=1.43$) than Chronic Prevention Focused individuals ($M= 5.39, SD= 1.62$). Equally Chronic Prevention Focused individuals chose slightly more prevention type strategies ($M=4.61, SD=1.62$) than Chronic Promotion Focused individuals ($M= 3.98, SD= 1.44$).

To calculate GRFM Strength individual's prevention scores were deducted from their promotion scores. Higher values indicating greater promotion strength and lower values indicating greater prevention strength.

A simple linear regression was calculated to predict the total number of promotion strategies chosen based on GRFM Strength. A significant regression equation was found ($F(1, 292) = 15.30, p < .001$), with an R^2 of .05. Participants' predicted promotion scores are equal to $5.42 + .03$. Participant's average promotion scores increased .03 for each unit of measure of GRFM Strength.

Table 8-9 Regression of GRFM Strength on Total Promotion Strategies Chosen

	<i>B</i>	<i>SE</i>	β	<i>t</i>
<i>DV: Total Promotion Strategies Chosen</i>				
Constant	5.42	0.12		47.23
GRFM Strength	0.03	0.01	0.22	3.91

Note $R^2 = .05$ ($p < .001$)

Table 8-10 Descriptive Statistics and Correlations Among Study variables

		M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Gender	1.67	0.47																		
2	TotAge	56.11	4.66	-0.01																	
3	Maritalstatus	2.04	1.24	0.11*	0.08																
4	Education	4.29	1.53	-0.08	-0.09	-0.06															
5	Householdincome	3.64	1.21	.21**	-.14*	.47**	.26**														
6	TotalTenure	19.47	12.44	-0.07	-.14*	0.03	-.21**	-0.09													
7	Retirementage	61.21	3.62	-0.02	.79**	0.10*	-0.03	-.17**	.14*												
8	Time to retirement in months	61.29	34.10	-0.02	-.63**	0.00	0.11	0.02	.05	-0.02											
9	TotSatisfWith Health	9.90	5.42	0.01	-.03	-0.02	0.06	0.00	-.01	-0.05	-0.01	0.88									
10	TotWorkSatis- faction	8.49	4.60	-0.06	-.09	-0.05	0.10*	-0.01	0.04	-.11*	0.00	.12*	0.91								
11	SWLTot	24.24	7.03	0.08	-.04	.20**	0.06	0.19**	-.04	-0.09	-0.05	-.22**	.20**	0.85							
12	GRFMStrength	9.75	11.92	-0.03	-0.06	-0.06	0.02	0.16**	0.04	-.11*	-0.04	-.16**	.10**	.25**	0.84						
13	Construal Level	17.86	4.18	-0.01	-0.05	-0.02	0.06	0.10	0.06	-0.05	0.02	-.02	0.08	.20**	0.01	0.80					
14	Total promotion strategies chosen	5.71	1.56	0.09	-0.04	0.02	0.14**	0.02	0.09	-0.05	0.01	-.13*	-0.07	0.18**	0.22**	.18**					
15	Total prevention strategies chosen	4.29	1.56	-0.09	0.04	-0.02	0.14**	-0.02	0.09	0.05	-0.01	.13*	0.07	-.18**	-.23**	.18**	-1.0**				
16	SCRASSTotal	50.38	13.49	-0.03	0.02	0.05	0.04	0.02	0.09	0.07	0.05	.16**	-0.01	-.27**	-.30**	-.12*	-.23**	0.23**	0.89		
17	PosPANASTot	35.17	9.02	0.03	-0.01	0.00	0.01	-0.04	0.09	-0.06	-0.06	-.03	0.21*	0.24**	0.21**	.19**	0.12*	-0.12*	-.45**	0.92	
18	NegPANASTot	14.86	5.27	-0.04	0.17**	0.00	0.09	0.00	0.08	0.13*	-.12*	.09	0.10*	-.31**	-.24**	.19**	-.22**	0.22**	0.37**	-.28**	0.84

N

294

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Cronbach Alpha scores in bold for each nominal scale

The next step was to carry out a hierarchical multiple regression to investigate the relationship between GRFM Strength and Promotion Focused Strategies Chosen and levels of pre-retirement anxiety, positive affect and negative affect, after controlling for demographic factors such as gender, age, anticipated retirement age, marital status, household income, education and tenure (Step1). Step 2 also controlled for self-reported satisfaction with health, life and work satisfaction. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. Additionally, the correlation amongst the predictor variables (GRFM Strength and Promotion Focused Strategies Chosen) included in the study was examined and these are presented in Table 10.11. The correlation was weak to moderate, $r = -.22$, $p < .01$. This indicates that multicollinearity was unlikely to be a problem (see Tabachnick and Fidell, 2007).

All variables were significantly correlated with SCRAS, PA and NA, which indicates that the data was suitably correlated with the dependent variables for examination through multiple linear regression to be reliably undertaken. The correlations between the predictor variables and the dependent variables (SCRAS, PA and NA) were all weak to moderately strong, ranging from $r = -.12$, $p < .05$ to $r = .30$ $p < .01$. The hypothesised relationship between GRFM Strength and SCRAS was negative with higher promotion strength associated with lower levels of anxiety. Hypothesis 8 can therefore be accepted and the null hypothesis rejected. It was also suggested that GRFM Strength would result in higher levels of positive affect and lower levels of negative affect. The correlations above were both significant and in the correct directions. Hypotheses 10 and 11 are, therefore, accepted and the corresponding null hypotheses rejected.

To further test the data for the combined effect of GRFM Strength and strategies chosen three hierarchical regressions were carried out. For the DV of

SCRAS the first step of hierarchical multiple regression, the demographic variables were entered: gender, age, anticipated retirement age, marital status, household income, education and tenure. This model was not statistically significant $F(7, 178) = .61; p = .75$ and explained 2.3 % of variance in SCRAS (Table 10.11). After entry of satisfaction with health, life and work satisfaction at Step 2 the total variance explained by the model as a whole was 11% ($F(3, 175) = 5.7; p < .01$). Finally, in step three, the variables of GRFM Strength and Promotion Focused Strategies Chosen were introduced and this final model accounted for an additional 7% variance in SCRAS, (R^2 Change = .07; $F(2, 173) = 7.29; p < .01$). In the final model, one out of two of the variables were statistically significant, with GRFM Strength recording a higher Beta value ($\beta = -.22, p < .01$) than Strategies chosen ($\beta = -.13, p = .07$)

For the DV of PA the first step of hierarchical multiple regression, the demographic variables were entered: gender, age, anticipated retirement age, marital status, household income, education and tenure. This model was not statistically significant $F(7, 178) = .52; p = .81$ and explained 2 % of variance in PA (Table 10.11). After entry of satisfaction with health, life and work satisfaction at Step 2 the total variance explained by the model as a whole was 13% ($F(3, 175) = 7.33; p < .001$). Finally, in step three the variables of, GRFM strength and Promotion Focused Strategies Chosen were introduced and this final model accounted for an additional 4% variance in PA, (R^2 Change = .04; $F(2, 173) = 4.26; p < .05$). In the final model, one out of two of the variables were statistically significant, with GRFM Strength recording a higher Beta value ($\beta = .19, p < .05$) than Strategies chosen ($\beta = .07, p = .07$)

For the DV of NA the first step of hierarchical multiple regression, the demographic variables were entered: gender, age, anticipated retirement age, marital status, household income, education and tenure. This model was not statistically significant $F(7, 178) = 1.58; p = .15$ and explained 5.8 % of

variance in NA (Table 10.11). After entry of satisfaction with health, life and work satisfaction at Step 2 the total variance explained by the model as a whole was 15.9% ($F(3, 175) = 6.96; p < .001$). Finally in step three the variables of, GRFM Strength and Promotion Focused Strategies Chosen were introduced and this final model accounted for an additional 5% variance in NA, ($R^2 \text{ Change} = .05; F(2, 173) = 5.33; p < .01$). In the final model two of the variables were statistically significant, with GRFM Strength recording a Beta value of $-.15, p < .05$ and Strategies Chosen $\beta = -.15, p < .05$.

Table 8-11 Hierarchical Regression Model

	<i>R</i>	<i>R</i> ²	<i>R</i> ² <i>Change</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>R</i>	<i>R</i> ²	<i>R</i> ² <i>Change</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>R</i>	<i>R</i> ²	<i>R</i> ² <i>Change</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
	<i>DV: SCRAS</i>							<i>DV: P.A.</i>							<i>DV: N.A.</i>						
Step 1	0.15	0.02						0.14	0.02						0.24	0.06					
Gender				-0.31	2.19	-0.01	-0.14				0.66	1.47	0.03	0.45				-0.20	0.84	-0.02	-0.24
Got Age				-0.17	0.35	-0.06	-0.49				0.23	0.24	0.12	0.95				0.27	0.14	0.23	1.96
Retirement Age				0.50	0.46	0.13	1.09				-0.35	0.31	-0.14	-1.15				-0.05	0.18	-0.04	-0.31
Marital status				0.76	0.91	0.07	0.83				-0.19	0.61	-0.03	-0.31				-0.01	0.35	0.00	-0.02
Household Income				0.65	1.00	0.06	0.65				-0.40	0.67	-0.05	-0.60				0.02	0.38	0.00	0.05
Education				0.42	0.70	0.05	0.60				0.33	0.47	0.06	0.71				0.46	0.27	0.13	1.71
Tenure				0.12	0.08	0.11	1.40				0.07	0.06	0.10	1.27				0.06	0.03	0.13	1.72
Step 2	0.33	0.11	0.09**					0.36	0.13	.11***					0.4	0.16	0.11***				
Got Satisfaction Health				-0.24	0.18	-0.10	-1.32				-0.02	0.12	-0.01	-0.13				-0.01	0.07	-0.01	-0.15
Work Satisfaction				-0.22	0.20	-0.08	-1.09				-0.43	0.14	-0.23	-3.17				-0.03	0.08	-0.02	-0.32
Got Satisfaction Life				-0.45	0.15	-0.24	-3.06				0.38	0.10	0.30	3.91				-0.24	0.06	-0.32	-4.26
Step 3	0.42	0.18	.07**					0.41	0.17	.04*					0.46	0.21	.05**				
GRFM Strength				-0.25	0.08	-0.22	-2.98				0.15	0.06	0.19	2.58				-0.07	0.03	-0.15	-2.10
Got Pro Strategies																					
Chosen				-1.14	0.63	-0.13	-1.81				0.38	0.43	0.07	0.88				-0.50	0.24	-0.15	-2.08

Statistical significance: *p<.05; **p<.01; ***p<.001

Having verified that that GRFM Strength combined with the type of strategies chosen explained a significantly additional amount of variance in the scores on SCRAS the relationship between the three variables was explored in greater detail. It was proposed that the type of strategies chosen would have a moderation effect on the relationship between GRFM Strength and SCRAS. A moderation analysis (Table 10.12 below) shows that the type of strategies chosen has a significant moderation effect on the relationship between GRFM Strength and scores on SCRAS. ($\Delta R^2 = 0.14$ $p < .01$)

Table 8-12 Moderation analysis for the DV of SCRAS

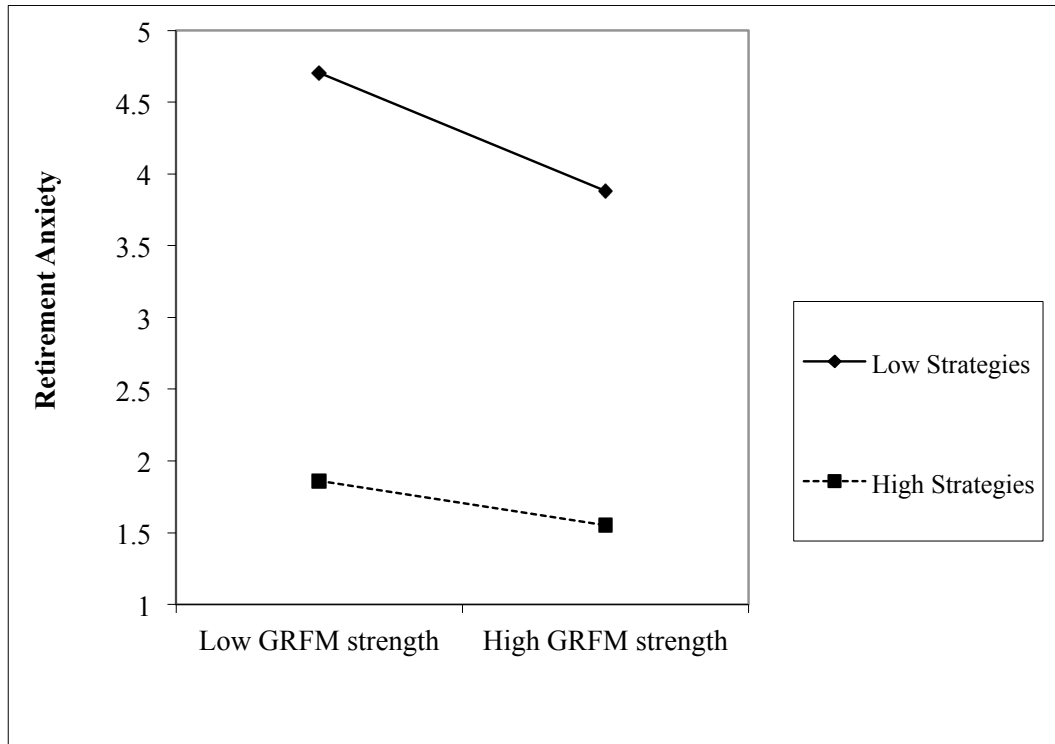
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1.00	.339a	0.12	0.11	12.74	0.12	18.85	2.00	291.00	0.000
2.00	.380b	0.14	0.14	12.55	0.03	10.05	1.00	290.00	0.002

a Predictors: (Constant), GRFMStrengthCent, TotProStraCent

b Predictors: (Constant), GRFMStrengthCent, TotProStraCent, GRFMxProStrCentered

To test the significance of the moderation effect a simple slope analysis was conducted. Simple slope tests are used to evaluate whether the relationship (slope) between x and y is significant at a particular value of the moderator (Dawson, 2014). Borrowing from the method by Aiken and West, (1991) commonly known as the computer model, an analysis of the slope above shows the slope is significant when the value of the moderator is set at 0 ($t = -4.482$ $p < 0.000$).

Figure 8.4 Moderating effect of strategies chosen on GRFM Strength - pre-retirement anxiety relationship (two way interaction with continuous moderator)



It was also proposed that the type of strategies chosen would have a moderation effect on the relationship between GRFM Strength and PA.

A moderation analysis (Table 8.13 below) shows that the type of strategies chosen had no significant moderation effect on the relationship between GRFM Strength and scores on PA. ($\Delta R^2 = 0.05$ $p = .81$)

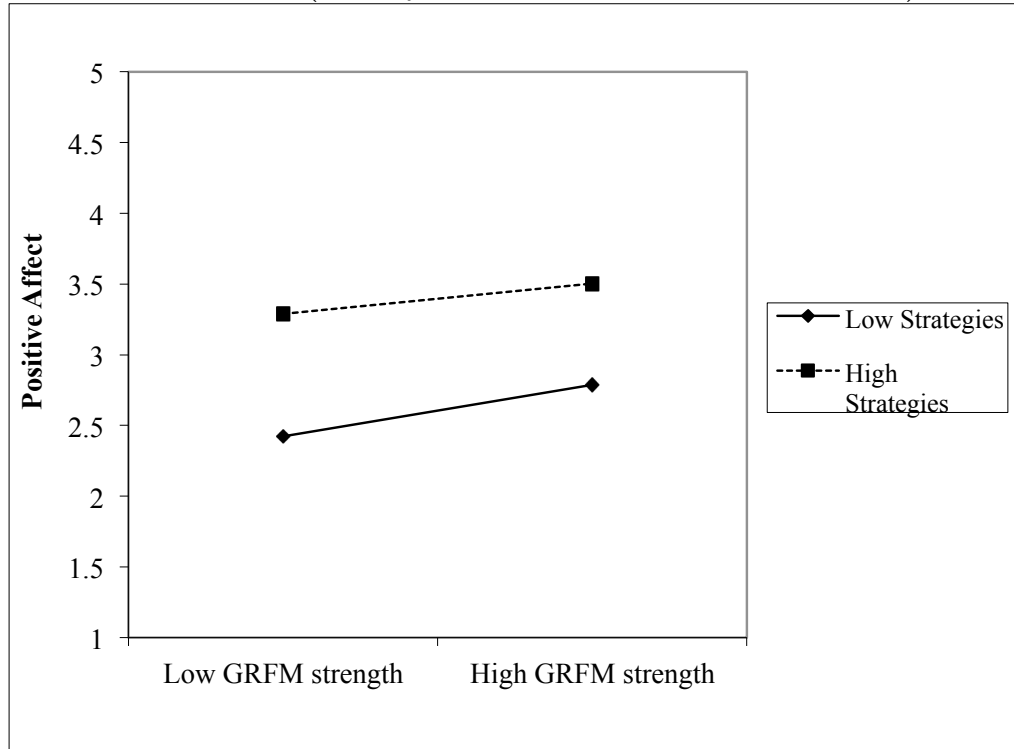
Table 8-13 Moderation analysis for DV of PA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.225a	0.051	0.044	8.81	0.051	7.788	2	291	0.001
2	0.238	0.057	0.047	8.8	0.006	1.81	1	290	0.81

Predictors: (Constant), TotProStraCent, GRFMStrengthCent

Predictors: (Constant), TotProStraCent, GRFMStrengthCent, GRFMxProStrCentered

Figure 8.5 Moderating effect of type of strategies chosen on the GRFM Strength - Positive Affect (two way interaction with continuous moderator)



Finally, it was proposed that the type of strategies chosen would have a moderation effect on the relationship between GRFM Strength and NA. A moderation analysis shows that the type of strategies chosen has a significant moderation effect on the relationship between GRFM Strength and scores on NA. A moderation analysis (Table 8.14) shows that the type of strategies chosen has a significant moderation effect on the relationship between GRFM Strength and scores on NA. ($\Delta R^2 = 0.95$ $p < .05$)

Table 8-14 Moderation Analysis for DV of NA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.293	0.086	0.079	5.05	0.086	13.62	2	291	0
2	0.321	0.103	0.094	5.01	0.017	5.64	1	290	0.018

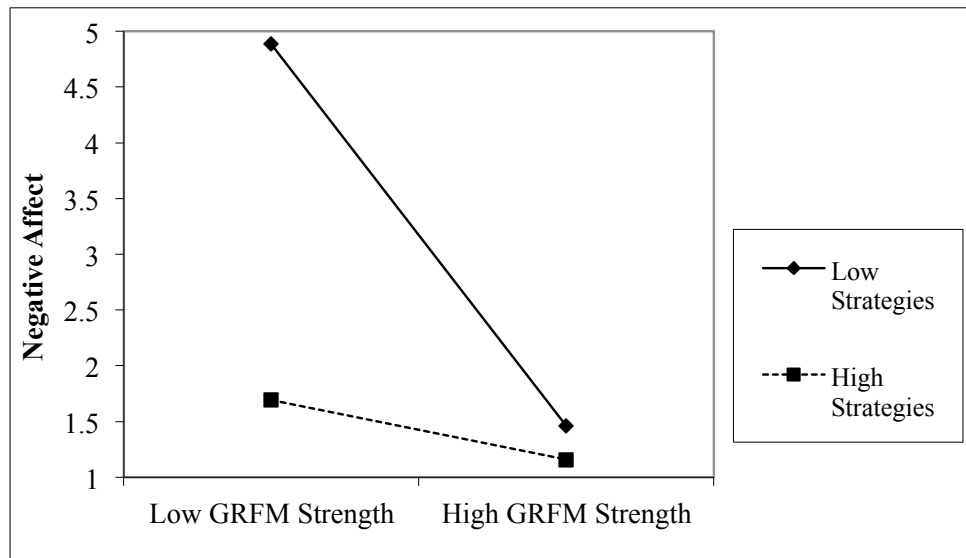
Predictors: (Constant), TotProStraCent,
GRFMStrengthCent

Predictors: (Constant), TotProStraCent,
GRFMStrengthCent, GRFMxProStrCentered

To test the significance of the moderation effect a simple slope analysis was conducted. Simple slope tests are used to evaluate whether the relationship (slope) between x and y is significant at a particular value of the moderator (Dawson, 2014).

Borrowing from the method by Aiken and West (1991) commonly known as the computer model, an analysis of the slope above shows the slope is significant when the value of the moderator is set at 0 ($t = -3.29$ $p < 0.01$).

Figure 8.6 Moderating effect of type of strategies chosen on the GRFM strength-Negative Affect (two way interaction with continuous moderator)



As discussed in the literature review, previous research has demonstrated a relationship between construal level and regulatory focus. Although, not the main focus of this research thesis, it was thought prudent to explore if such a relationship existed in the current study. According to regulatory focus theory (Higgins 1997, 2000), individuals with a prevention focus regulate their attitudes and behaviours to attain safety and security, whereas those with a promotion focus regulate their attitudes and behaviours to attain growth and achievement. Individuals with a prevention focus are likely to construe information and events at a low level, whereas those with a promotion focus are inclined to construe information and events at a high level (Lee et al., (2009).

As the current research predicts that individuals regulatory focus will impact their feelings of pre-retirement anxiety and affect it is proposed that this relationship may be mediated by how individuals construe the impending event. To test for mediation a number of assumptions between the variables must be satisfied first. According to Barron and Kenny (1986) a variable functions as a mediator when it meets the following conditions: (a) variations in levels of the independent variable significantly account for variations in the presumed mediator, (b) variations in the mediator significantly account for variations in the dependent variable, and (c) when a and b are controlled for, a previously significant relation between the independent and dependent variables is no longer significant. An inspection of the correlation matrix (Table 8.10) shows that there is no significant relationship between GRFM strength and Construal Level. The first assumption of Barron and Kenny is therefore not achieved.

However, Preacher, Rucker and Hayes (2007) suggest that bootstrapping resampling strategies may be used without any prior conditionality such as that suggested by Baron and Kenny (1986). In fact they state that in “using bootstrapping, no assumptions about the shape of the sampling distribution of the statistic are necessary when conducting inferential test” (2007, p. 190).

Employing the “Process” model in SPSS to test for any mediation effect of construal level (model 4 in Preacher et al., 2007) on the relationship between GRFM Strength and pre-retirement anxiety was conducted. Results suggest that construal level does in fact mediate the relationship between GRFM strength and pre-retirement anxiety, with an indirect effect of $-.0009$ $p < .01$. To explore the nature of the relationships between the predicted variables the data was subjected to further analysis. Specifically a moderated mediation analysis, model 2 of Preacher et al. (2007) was conducted. There was no significant results found for the interaction effect of GRFM strength and construal level, R -square change of $.0024$ $p = .37$. However, the interaction effect of GRFM strength and the number of promotion strategies chosen was significant with a R -square change of $.02$ $p < .01$. Running through other variations of the Preacher et al. models did not produce any further significant results. While these results confirm previous research that suggests that there is a relationship between construal level and regulatory focus it is not the main focus of the present research thesis and therefore no further exploratory analysis were deemed necessary. The results of the main investigations outlined above are discussed in detail in the next section.

8.3.12 Preliminary Discussion

An initial examination of the relationships between the variables in Study 3 indicated some positive and negative associations. There was no significant difference in the dependent variable scores of retirement anxiety, positive affect and negative affect for males and females for example. Of the other three grouping variables used in Study 3 (Marital Status, Education and Household Income) only household income showed any significant difference in the scores for negative affect. All three showed no significant difference in scores on retirement anxiety or positive affect.

Of the continuous variables age had no bearing on the scores for retirement anxiety or positive affect but it did have a significant correlation with negative affect. This indicates that older participants had a significantly high level of negative affect with age explaining 17% of the variance in the negative affect scores.

Tenure was not significantly correlated with either retirement anxiety, positive affect or negative affect. Retirement age, while not significantly correlated with retirement anxiety or positive affect, was significantly correlated with negative affect at the $p < .05$ level. Retirement age explained 13% of the variance in the scores on negative affect. Time to retirement also significantly correlated with negative affect explaining 28% of the variance in the scores on negative affect. Time to retirement did not significantly correlate with retirement anxiety or positive affect. Looking at all three results in relation to age, it would seem to indicate that as individuals get older, time to retirement gets shorter either as a result of age or an earlier anticipated retirement age, their feelings of negative affect increase. Recent studies of life course ageing suggest that in advanced age, life satisfaction declines and negative affect increases over time (Slavsvold et al, 2012). In the present study the PANA Schedule was introduced with deliberate wording to link the items of the schedule with the individual's thoughts about their retirement preparation strategies. It was always presented after the strategy choice measurement and specifically asked the participants to "reflect on the choices" they just made in terms of strategies to prepare for retirement. Goal Striving Theory, (Sheldon & Elliot, 1999) suggests increases in wellbeing and adjustment are achieved through the successful pursuit of self-concordant personal goals. The strategy choices made by the participants in the section preceding the PANAS measurement may be a mismatch with their regulatory orientation and therefore they may experience greater levels of negative affect.

The only other significant relationship that the demographic variables had with the other study variables was the relationship between anticipated retirement age and work satisfaction. A significant negative correlation was found between the two variables [$r = -.11$, $n = 294$, $p < .05$]. While this does not imply cause or order effect it would appear to indicate that greater levels of work satisfaction would indicate an older anticipated retirement age. This would be in line with theoretical frameworks that the degree to which individuals are committed to their work-role influences their desire to remain a member of the workforce as proposed by “Work Role Attachment Theory” (Carter & Cook 1995).

When the psychosocial variables of satisfaction with health (SWH), satisfaction with life (SWL) and work satisfaction (WS) were examined in relation to the dependent variables of pre-retirement anxiety, positive affect and negative affect a number of associations were found to be significant. All three were significantly associated with pre-retirement anxiety, for example. Interestingly, SWH and SWL were both negatively associated with anxiety, indicating that greater levels of satisfaction with participant’s health and life reduced their levels of anxiety about their retirement. However, WS was positively associated with anxiety suggesting that participants that were more satisfied with their work were more anxious about retiring. Continuity Theory (Atchley, 1989) proposes that older individuals attempt to preserve consistent life pattern before and after retirement in order to mitigate unwelcome disruption. Research has found that higher level of job satisfaction and negative attitudes towards retirement are reliable predictors of retirement decisions (Gobeski & Beehr, 2009). Overall the inclusion of the psychosocial variables in a hierarchical regression model showed that together they explained a 9% additional variance in the scores on retirement anxiety over the 2% explained

by the demographic variables. This is in keeping with the overall conceptual model proposed at the outset of the present study.

The three psychosocial variables were also examined in terms of their relationship with positive affect (PA) and negative affect (NA). In the case of SWH there was no significant correlation between it and PA or NA. SWH explained only 3% of the variance in PA and 9% in NA. SWL on the other hand was significantly correlated with PA and NA with 24% and 31% of variance explained respectively. Finally, WS was significantly correlated with PA explaining 19% of the variance, but was not significantly correlated with NA only explaining 8% of the variance. The results of the SWL scale and PANAS is in line with previous research that has found similar relationships with the same instrument and PANAS (see for example Chmiel et al, 2012).

Similar to Study 2, this study found that individuals who were more promotion oriented were more likely to choose promotion approach strategies than individuals who were more prevention oriented whereas prevention oriented individuals were more likely to choose more prevention avoidance strategies than promotion oriented individuals. There was a statistically significant difference between chronic promotion focus individuals and chronic prevention focused individuals on the type of strategies chosen. An inspection of the mean scores indicated that Chronic Promotion Focused individuals chose slightly more promotion type strategies ($M=6.02$, $SD=1.43$) than Chronic Prevention Focused individuals ($M= 5.39$, $SD= 1.62$). Equally Chronic Prevention Focused individuals chose slightly more prevention type strategies ($M=4.61$, $SD=1.62$) than Chronic Promotion Focused individuals ($M= 3.98$, $SD= 1.44$). With the emphasis this time on retirement and the sample being targeted at those over 50 years of age and planning to retire within ten years these results support the contention that the set of strategies developed in

Study 1 and tested in Study 2 are distinguishable as either eager promotion approach or vigilant prevention avoidance type. Hypotheses 4 and 5 are, therefore, confirmed.

The same measurement was used to measure chronic regulatory focus in the current study as in Study 2. This time the General Regulatory Focus Measurement (Lockwood et al., 2002) resulted in a Cronbach's α for the promotion scale of .84 and a Cronbach's α for the prevention scale of .84. As in Study 2 the approach taken in the current study was to divide the sample into two groups, promotion focused and prevention focused and then subtracting the prevention scores from the promotion scores and using a median split to produce the two groupings. As explained in Study 2, this method was used in order to validate the current study by observing the original methodology utilised by Higgins et al. (1994, 2001) however, it does not lend itself to the testing of the hypotheses in this study. Therefore, a measure of promotion strength was developed by subtracting prevention scores from promotion scores with higher scores indicating a greater promotion strength. Negative scores on this scale indicate a greater prevention strength.

As reported in Study 2, the reliance on this difference-score measure is also justified by the analyses reported in this study. In other words that our data meet the criteria required to satisfy the model underlying a difference score analysis (see Edwards, 1994, 1995): Promotion and prevention focus strengths had independent, equal but opposite effects on the tendency to choose promotion or prevention type strategies. This strength measure was labelled GRFM Strength and a linear regression analysis demonstrated a positive relationship between GRFM Strength and the number of promotion strategies chosen. Hypothesis 6 can therefore be accepted.

Regulatory focus has been conceptualised as either a self-guide definition, distinguishing promotion and prevention in terms of the degree to which two

possible “self-guides” are used for regulation or alternatively the reference-point definition, which distinguishes promotion and prevention focus on the basis of which of two possible end-states is used in goal regulation (Summerville & Roese, 2008). In the current study, the reference point definition was chosen as the research was interested in whether individuals chose goals that were focused on the positive reference-point of a “gain” (i.e., a goal to reach a desirable or pleasurable end-state and avoid the absence of these states) i.e. promotion focused goals. Or alternatively regulation centring on the negative reference-point of a “loss” (i.e., a goal to steer clear of an undesirable or unpleasant end-state and attain an absence of these states) i.e. prevention focused goals. The GRFM scale was chosen as Summerville and Roese (2002) suggests it functions much more like a measure of approach and avoidance (the BIS/BAS) than like the RFQ, which is closer to the self-guide definition. Having achieved very similar results to Study 2 the association between GRFM Strength and type of goals chosen support the contentions made by Summerville and Roese (2008) that the GRFM scale developed by Lockwood et al. (2002) aligns with the reference point definition of strategic inclination proposed by Regulatory Focus Theory.

As suggested in Study 2, the ability to integrate specific types of retirement preparation strategies with individual regulatory orientations presents the possibility to gain a greater understanding of the effects of pursuing matching and non-matching strategies. The main aim of Study 3 was to determine if this regulatory fit or non-fit between chronic regulatory focus and the type of strategies chosen has any impact on the levels of pre-retirement anxiety and positive and negative affect experienced by those approaching retirement.

A hierarchical multiple regression was performed to investigate the ability of GRFM Strength and Promotion Focused Strategies Chosen to predict

levels of pre-retirement anxiety, positive affect and negative affect, after controlling for demographic factors such as gender, age, anticipated retirement age, marital status, household income, education and tenure (Step1); and also controlling for self-reported satisfaction with health, life and work satisfaction (Step 2). Results demonstrated support for hypotheses 8, 10, and 11.

For the DV of SCRAS neither the demographic variables nor control variables had a significant effect on the scores for pre-retirement anxiety. However when the predictor variables of, GRFM Strength and Promotion Focused Strategies Chosen were introduced the variables accounted for an additional 7% variance in SCRAS. This supported hypothesis 8 that GRFM Strength will be negatively associated with SCRAS.

In order to establish the nature of the relationships between the variables, a moderation analysis was conducted. When the moderating effect of the promotion strategies chosen was examined it showed that the higher the number of promotion strategies chosen had the effect of lowering pre-retirement anxiety by a significant amount ($p < 0.000$). The slope analysis showed that when GRFM Strength and promotion strategies were both high the levels of pre-retirement anxiety were at their lowest. When the opposite was true, indicating a greater mismatch between chronic orientation (high GRFM Strength and low number of promotion strategies chosen) the levels of anxiety rose significantly.

When GRFM Strength was low and more promotion strategies were chosen, the mismatch did also result in relatively higher levels of anxiety. However, when there was a match between low GRFM Strength and low levels of promotion strategies chosen the levels of pre-retirement anxiety reached the highest levels of all the results measured. Therefore hypothesis 10 .1: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the

level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”) is supported. However, for Hypothesis 10.2: The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”) is not supported.

Higgins’ theory of regulatory fit proposed that motivational strength would be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one’s orientation lends a subjective sense of importance to the activity (see Higgins, Idson, Freitas, Spiegel, & Molden, 2003), which should lead to a greater sense of commitment to the goal. The current study contended that this would impact on the levels of pre-retirement anxiety experienced by those who chose goals that matched their regulatory orientation as measured by the GRFM scale. While meta-analytical studies have suggested that sustaining regulatory fit leads to greater behavioural intention (Motyka et al., 2014), the current research suggests this holds true for promotion fit and not for prevention fit. Perhaps for chronically prevention focused individuals, the impending retirement event itself produces more negative emotions than it would for chronically promotion focused individuals. Choosing prevention focused strategies could, therefore, feel right, a match between their chronic orientation strategic inclinations, but rather than attenuating their negative emotions they may in fact compound them.

A recent meta-analytical study by Motyka et al. (2014) demonstrated that regulatory fit is not a simple construct and that in fact a number of moderators of fit are in play at any one time. These fit moderators had different effects on behavioural intentions, evaluations and behaviour. Motyka et al.’s

study looked at consumer behaviour and was interested in measuring attitudes towards products or issues (evaluation); readiness to perform a behaviour (behavioural intention) and acts performed by consumers (behaviour). While the current study did not measure actual behaviour, the choice of strategies would be considered an indication of behavioural intention. Consumer behaviour literature has established that there is an inconsistency between attitudes and behaviours (Smith & Swinyard, 1982), with correlations between attitudes and overt observation of behaviour being reported as $r = 0.52$ (Glasman & Albarracín, 2006, p.806 in Motyka et al., 2014). However, the relationship between attitude and intention has been found to be higher ($r = .66$) (Sheppard et al., 1988). This supports the theory that when regulatory fit is observed it should effect behavioural intention and lead to different outcomes depending on the type of fit observed. Motyka et al. tried to unravel the moderators that could determine what contributes to these differences. For example, researchers need to take into account whether or not the study involves chronic or momentarily primed regulatory focus. Self-induced priming has a stronger effect on evaluation and behavioural intention relative to chronic focus. Chronic focus on the other hand has a stronger effect on actual behaviour (ibid, 2014). Regulatory focus has also been assessed by using two regulatory orientations, promotion and prevention. Motyka et al. showed that promotion fit shows a stronger effect on evaluation than prevention fit whereas prevention fit shows a stronger effect on behaviour than promotion fit. There was no difference observed for behavioural intention.

Induction techniques were also shown to have a moderation effect on behavioural intentions, evaluation and behaviour. Creating fit by sustaining or matching regulatory focus had no difference on evaluation or behaviour, however, sustaining regulatory fit had a stronger effect on behavioural intention than matching. “Prompting individuals to engage in decision making processes

that are either consistent or inconsistent with their regulatory orientation” is sustaining regulatory fit (Aaker & Lee, 2006, p. 16, in Motyka et al., 2014). Whereas matching is a process that “leverages the outcome to which individuals with distinct regulatory goals are sensitive” (Aaker & Lee, 2006, p.16 in Motyka et al., 2014). According to the theory of planned behaviour (Ajzen, 1985), a number of factors can cause inconsistency between attitude, behaviour intentions and behaviour. More importantly, according to this theory, positive evaluations of an option do not necessarily result in a more favourable behaviour towards that option (Motyka et al., 2014). This would seem to indicate that any examination of the results of the current study needs to look at the impact of fit on pre-retirement anxiety and affect while closely looking at the differences observed in the different fit conditions.

So far the impact on pre-retirement anxiety has been discussed. The other outcomes measured were Positive Affect and Negative Affect. These were assessed by the PANA Schedule (Watson, et al., 1988b). A hierarchical multiple regression was performed to investigate the ability of GRFM strength and Promotion Focused Strategies Chosen to predict levels of positive affect, after controlling for demographic factors such as gender, age, anticipated retirement age, marital status, household income, education and tenure (Step1); and also controlling for self-reported satisfaction with health, life and work satisfaction (Step 2). Results demonstrated support for hypotheses 5: GRFM Strength will be positively correlated with Positive Affect (PA).

For the DV of PA the demographic variables did not have a significant effect on the scores for pre-retirement anxiety. After entry of satisfaction with health, life and work satisfaction at Step 2 the total variance explained by the model as a whole was 13%. Finally in step three the predictor variables of, GRFM strength and Promotion Focused Strategies Chosen were introduced and

this final model accounted for an additional 4% variance in PA. This supported hypothesis 5 that GRFM Strength will be positively correlated with PA.

When the moderating effect of the promotion strategies chosen was examined it showed that the promotion strategies chosen had no significant moderating effect on positive affect. Therefore hypothesis 11.1 “The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”) is not supported. Also, hypothesis 11.2 “The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM strength and Positive Affect such that the level of positive affect will be greater when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”)” is not supported.

Summerville and Roese (2008) suggest that when defined in terms of reference-points, as in the GRFM, promotion focus is associated with positive affectivity, whereas prevention focus is associated with negative affectivity. It appears difficult to disentangle the reference-point definition of regulatory focus from affectivity using self-report measures. Thus caution is advised when drawing conclusions on the basis of reference-point measures. They suggest that findings will contain significant variation in affectivity. The results outlined above suggest that positive affect is stronger for promotion focused individuals and the choice of strategies (promotion or prevention) does not have a moderating effect on this relationship to any significant degree.

A third hierarchical regression showed that for the DV of NA the demographic variables did not have a significant effect on the scores for pre-retirement anxiety. After entry of satisfaction with health, life and work satisfaction at Step 2 the total variance explained by the model as a whole was

15.9%. And finally in step three the predictor variables of, GRFM Strength and Promotion Focused Strategies Chosen were introduced and this final model accounted for an additional 5% variance in NA. This supported hypothesis 12.1 that GRFM Strength will be negatively associated with NA.

When the moderating effect of the promotion strategies chosen was examined it showed that the higher the number of promotion strategies chosen had the effect of decreased levels of negative affect. However, once again the slope analysis showed that when GRFM Strength and promotion strategies were both high the levels of negative affect were at their lowest. When the opposite was true, indicating a greater mismatch between chronic orientation (high GRFM Strength and low number of promotion strategies chosen) the levels of negative affect rose significantly. When GRFM Strength was low and more promotion strategies were chosen the mismatch did also result in relatively higher levels of negative affect. However, again when there was a match between low GRFM Strength and low levels of promotion strategies chosen (indicating a fit) the levels of negative affect reached the highest levels of all the results measured. Therefore hypothesis 12.1 “The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM Strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **high** (therefore a greater “fit”)” is supported. However, for Hypothesis 12.2 “The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM Strength and Negative Affect such that the level of negative affect will be lower when both GRFM Strength and the number of promotion strategies chosen are **low** (therefore a greater “fit”)” is not supported.

The current study contended that the fit between chronic regulatory focus and type of strategies chosen would impact on the levels of negative affect experienced by those who chose goals that matched their regulatory orientation as measured by the GRFM scale. To examine what may be happening in the prevention fit condition, we need to take a closer look at the outcomes. The SCRAS scale contains twenty three items. In the current study, we established that these items were spread over four factors similar to the original study in which they were created (Fletcher & O'Hansson, 1991). The four factors in the current study were social integration (7 items), social adjustment, (8 items), social exclusion (6 items) and social hardiness (2 items). The items were framed in different ways and an examination of the wording would suggest that a lot of items were framed negatively or as a loss. "I am afraid that I will lose all my work friends as a retired person" or "I will probably be sitting around alone after I retire" for example. In fact, with the exception of five items, all items were framed in a negative or as a loss. Examples of the exceptional items are "I have lots of friends I can depend on if I need them after I retire" and "Retirement will give me opportunities to make new friends".

For the positive affect and negative affect outcomes, the PANAS contains twenty items. Ten of these are framed positively measuring positive affect and ten are framed negatively measuring negative affect. According to Regulatory Focus Theory promotion oriented individuals will be more sensitive to outcomes that are framed as gains or non-losses and prevention oriented individuals are more sensitive to outcomes that are framed as a loss or a non-gain. In fact recent research has looked at this contention from a Loss Aversion Theory perspective (Sacchi & Stanca, 2011). According to L. A. Theory (Kahneman & Tversky, 1979), the subjective disutility associated to an outcome coded, as a loss should be larger than the subjective disutility associated to the same outcome when coded as a non-gain. While the opposite should hold true

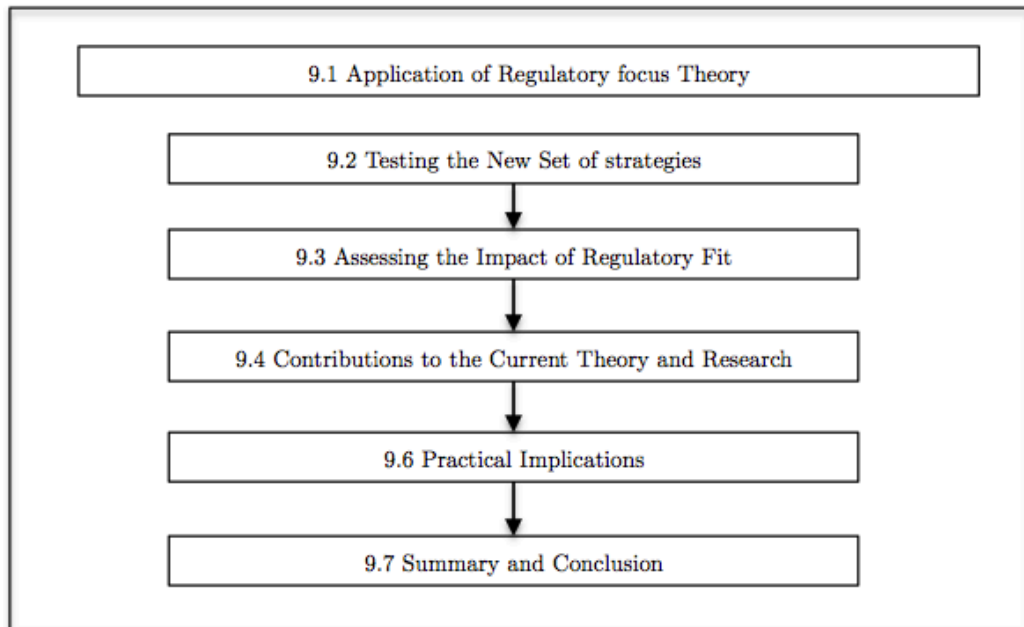
for positive outcomes other research (Lieberman et al., 2005, for example) showed that while the results for the negative outcome conditions supported the contention that losses are perceived more strongly than non-gains, the opposite was in fact not true for the positive outcome conditions. Contrary to L.A. theory gains were perceived more strongly than non-losses.

Should the individuals in the prevention fit condition in the current study perceive the outcomes as outlined above then the “losses loom larger effect” could explain why they reported greater pre-retirement anxiety, less positive affect and more negative affect. Research on regulatory fit to date suggests that the experience of feeling right leads to heightened importance of reactions, increased confidence and increased engagement in reactions (e.g., Avnet and Higgins 2006; Higgins 2000). Individuals feel right about their response, and thus positive reactions become more positive, and negative reactions become more negative (Cesario, et al., 2004 in Aaker and Lee, 2006).

The following chapter contains a general discussion, incorporating the results of all three studies and positions these results in relation to the current literature and research.

Chapter 9 General Discussion

Figure 9.1 Layout of Chapter 9



The aim of this research programme was to examine how individuals pursue retirement preparation strategies by applying a model of self-regulation to the study of retirement planning behaviours. It set out to test the impact of goal pursuit strategies on the feelings experienced by individuals approaching retirement. This research demonstrates that RFT (Higgins, 1997, 2000) offers us an opportunity to gain a deeper understanding of the processes underlying “how” individuals implement retirement preparation strategies. In the process of researching this topic and the absence of the application of this model in previous research, a number of important questions arose. The answers to these questions will be discussed in this chapter. Implications of the results of the three studies presented in this thesis form the basis of this general discussion. This will be followed by a discussion of the limitations of the present research and the implications it has for future research.

9.1 Application of Regulatory Focus Theory

In reviewing the literature on retirement planning behaviours, it became evident that the means by which individuals pursue their retirement preparation goals has received little attention. Most of the existing literature focuses on the predictors of retirement planning, with the exception of some studies that have identified psychological factors that impact on planning behaviours (Hershey, Jacobs-Lawson, McCardle & Hamagamin, 2007, Petkoska & Earl, 2009). However, this research has not been based on any underlying theoretical model. Regulatory focus theory (Higgins, 1994, 1997) is a motivational theory of self-regulation that has the potential to offer a new and greater understanding of the processes involved in how individuals pursue retirement preparation strategies. The first proposition of this research programme suggests, that by applying regulatory focus theory (Higgins, 1997), it should be possible to establish retirement preparation strategies that are representative of either a promotion focus or a prevention focus. This led to the first question of the present research. *Does prevention (promotion) focused priming elicit prevention (promotion) focused retirement preparation strategies?* In order to examine the possibility that individuals would distinguish between promotion and prevention strategies, a qualitative approach was adopted in Study 1, to elicit retirement preparation strategies utilising an online survey. A number of categories were established including health, finances, activity, contributions to one's community and work after retirement. These categories have been identified previously as major contributors to retirement satisfaction and adjustment (Quinn, et al., 1990; Taylor & Shore, 1995; Wong & Earl, 2009, Leung & Earl, 2012).

Employing a supraliminal semantic priming technique, two versions of the survey revealed that individuals primed by promotion wording included in the

survey questions, proposed a number of promotion type strategies. These were reflective of a promotion focus, as suggested by RFT, and confirmed by an inter-rater process carried out with three subject matter experts. Those primed by prevention wording in the survey questions proposed a number of prevention type strategies which were again confirmed by the same three subject matter experts. The final groups of strategies were used to form a new set of retirement preparation strategies, containing ten-promotion type and ten-prevention type covering the categories used in the elicitation questionnaire. While these categories are reflective of similar questionnaires used in previous literature (see Muratore & Earl, 2010; Donaldson, et al., 2010; Kornadt & Rothermund, 2014, for example), they contained one distinctive difference. The promotion type strategies all reflected a focus on approaching a gain or avoiding the possibility of not achieving the goal, a non-gain (Higgins, 1997, 2000) and on achieving success (Lockwood & Kunda, 2010). The prevention type strategies all reflected a focus on preventing a loss, a cautious approach, and one focused on preventing failure (Higgins, 1997, 2000, Lockwood & Kunda, 2010).

It is important to note at this point that the semantic priming technique used in Study 1 was only used to elicit retirement strategies as opposed to activating them. Forster and Liberman (2007) suggest that it is difficult to distinguish whether any given manipulation has primed a semantic concept, a goal or a procedural routine. The aim of Study 1 was to activate the semantic networks of individuals in relation to retirement goals and the strategies to achieve them. Previous research has demonstrated that priming of concepts increases their accessibility, facilitating processing of meaningfully related constructs (Forster, Liberman & Friedman, 2009). The sheer volume and complexity of the results would seem to suggest that the primary aim of the semantic priming task in Study 1 was achieved.

9.2 Testing the New Set of Strategies.

Eliciting the strategies in Study 1 was designed to address a gap in the current literature on retirement planning behaviours by using them to establish a set of promotion and prevention retirement preparation strategies. The creation of these strategies gave rise to the second question of the present research, namely “*Will individuals choose retirement strategies (e.g., prevention-focused strategies) that match their chronic regulatory orientation (e.g., prevention orientation?)*”

The aim of Study 2 was to test if the new set of strategies elicited in Study 1 would be supported by the RFT contention that individuals with a promotion orientation have a sensitivity to the presence and absence of positive outcomes (see Higgins & Tykocinski, 1992), therefore being eager to pursue all means of advancement as their preferred strategy for self-regulation (Camacho, Higgins, and Luger, 2003). It was expected that promotion-oriented individuals would choose the promotion type strategies, developed in Study 1, which contained means of achieving positive outcomes. This formed the basis of Hypothesis 3 and 6, which predicted that chronic promotion focus strength would be positively associated with the number of promotion strategies chosen. Conversely, RFT also proposes that individuals with a prevention orientation have a sensitivity to the absence and presence of negative outcomes (see Higgins & Tykocinski, 1992), therefore being vigilant or careful to avoid mistakes should be their preferred strategy for self-regulation (Camacho et al, 2003). Therefore, it was expected that prevention-oriented individuals would choose the prevention strategies developed in Study 1 that contained means of avoiding negative outcomes.

As discussed in the preliminary discussion, Study 2 utilised the set of strategies developed in Study 1 with one important difference. It phrased the questions in relation to the various categories with a focus on preparation for the future, rather than on retirement, as not all of the target group were necessarily near retirement. Study 2 also utilised the General Regulatory Focus Measure Strength to assess the respondent's chronic orientation. This was chosen as it is associated with the reference point definition of regulatory focus, rather than the self-guide definition and functions as a measure of approach and avoidance.

Study 2 results indicated that individuals who were more promotion oriented were more likely to choose promotion approach strategies than individuals who were more prevention oriented whereas prevention oriented individuals were more likely to choose prevention avoidance strategies than promotion oriented individuals. This is similar to the predictions from RFT that framing an outcome in terms of gain or non-gain should lead to a promotion focus activation, whereas framing it in terms of loss or non-loss should imply a prevention focus activation (Shah et al., 1998). Research in the consumer behaviour literature has been to the forefront when investigating the impact of goal orientations and message framing on consumer behaviour. Research in this area indicates that promotion focused consumers are more sensitive to positive outcomes, whereas prevention focused consumers are more sensitive to negative outcomes (Chang & Cho, 2008). Interestingly, Summerville and Roesch (2007) note that the difference between the GRFM and the RFQ (Higgins et al., 2001) pivots on affect. They suggest that when defined in terms of reference-points, promotion focus is associated with positive affectivity, whereas prevention focus is associated with negative affectivity. However, this conflicts with the original conceptualisation of regulatory focus theory that suggests promotion and prevention are independent of affective valence (Idson, et al., 2000). Higgins

(1997) emphasised that regulatory focus was orthogonal to the alternative framework of motivation, approach and avoidance motivation, and that approach and avoidance are closely related to positive and negative affect. Bearing this in mind, in Study 3, the association between approach and avoidance strategies and affect was measured.

9.3 Assessing the Impact of Regulatory Fit.

Similar to Study 2, Study 3 found that individuals who were more promotion oriented were more likely to choose promotion approach strategies than individuals who were more prevention oriented, whereas prevention oriented individuals were more likely to choose more prevention avoidance strategies than promotion oriented individual. Initial analysis of the data in Study 3 focused on verifying the results of Study 2 within the new sample. The same variables were used to measure chronic regulatory orientation and the type of strategies chosen (promotion and prevention). This time the wording of the strategy questions emphasised preparation for retirement as distinct from preparation for the future utilised in Study 2, as the target group were all within ten years of retirement. Statistically significant results were obtained both for when a median split approach was utilised to create promotion and prevention groups and for the continuous measure approach to establish the level of association between the strength measure of promotion focus and the number of promotion strategies chosen.

Subsequent analysis focused on determining if regulatory fit between chronic regulatory focus (IV) and the type of strategies chosen had any impact on the levels of pre-retirement anxiety and positive and negative affect (DVs) experienced by those approaching retirement. This part of the analysis within

Study 3 was dedicated to examining the theorised relationships proposed in the structural model. Higgins' theory of regulatory fit proposed that motivational strength would be enhanced when the manner in which individuals work toward a goal sustains (rather than disrupts) their current regulatory orientation. Completing a goal in a way that sustains one's orientation lends a subjective sense of importance to the activity (see Higgins, et al., 2003), which should lead to greater commitment to the goal. The adjusted model contended that the type of strategies chosen would moderate the relationship between GRFM Strength and the levels of pre-retirement anxiety experienced. Specifically it proposes that those who chose goals that matched their regulatory orientation, as measured by the GRFM scale, would experience significantly lower levels of retirement anxiety, greater positive affect and less negative affect after controlling for demographic variables, self-reported satisfaction with health, satisfaction with life and work satisfaction.

A hierarchical multiple regression demonstrated support for hypotheses 8, that GRFM Strength would be negatively associated with pre-retirement anxiety. GRFM Strength and Promotion Focused Strategies Chosen accounted for an additional 7% variance in pre-retirement anxiety as measured by SCRAS. They also accounted for an additional 4% variance in positive affect (PA) supporting hypotheses 10 and an additional 5% variance in negative affect (NA) supporting hypothesis 11.

Further analysis showed that the moderating effect of the promotion strategies chosen had a significant effect on the pre-retirement anxiety levels reported by the participants. The higher the number of promotion strategies chosen had the effect of lowering pre-retirement anxiety by a significant amount. Further slope analyses confirmed that when GRFM Strength and promotion strategies were both high, the levels of pre-retirement anxiety were at their lowest. However, when GRFM Strength was high and the number of

promotion strategies chosen was low, indicating a greater mismatch between chronic orientation, the levels of anxiety rose significantly. When GRFM Strength was low and more promotion strategies were chosen the mismatch did also result in relatively higher levels of anxiety. However, when there was a match between low GRFM Strength and low levels of promotion strategies chosen the levels of pre-retirement anxiety reached the highest levels of all the results measured. Therefore hypothesis 10.2 “The type of strategies chosen (promotion type or prevention type) will moderate the relationship between GRFM Strength and pre-retirement anxiety such that the level of anxiety will be lower when both GRFM Strength and the number of promotion strategies chosen are low is not supported.

These results indicate that a promotion regulatory orientation and approach fit produces results in the direction theorised by regulatory fit theory. However, a prevention regulatory orientation and avoidance fit produced results in the opposite direction to what was expected. A review of results from the tests for all three dependent variables shows findings that are inconsistent with regulatory fit theory. Examining the individual fit conditions, the first two, (1) high GRFM Strength/High number of promotion strategies (a fit); (2) high GRFM Strength/low number of promotion strategies (a non-fit); produce results in the theorised direction. The second two conditions, (3) low GRFM Strength/High number of promotion strategies (a non-fit) and (4) low GRFM Strength/low number of promotion strategies (a fit) produced results in the opposite direction to that theorised.

An item level examination of the outcome scales considered in the preliminary discussion suggested that the wording of the items could have influenced how individuals responded to them. As prevention orientated participants are particularly sensitive to negatively worded items, they may have responded more negatively to them. Loss Aversion theory (Kahneman &

Tversky, 1979) suggests that the subjective disutility of an outcome coded as a loss, should be larger than the same outcome coded as a non-gain. The losses loom larger effect may be part of the reason why prevention oriented participants reported more pre-retirement anxiety, less positive affect and more negative affect. This does raise the question of just how effective are the measures involved in this study and indeed in many other studies if the negative wording of items are more readily answered by prevention oriented individuals. Avnet and Higgins (2006) suggest that the experience of “feeling right” leads to heightened importance of reactions, increased confidence and increased engagement in reactions.

Creating ‘a feeling right experience’ from regulatory fit does not only intensify positive reactions. The consequences derived from regulatory fit feeling right experience has the same effect on both positive and negative reactions, so, if the reaction to something is negative, regulatory fit will intensify that reaction. It is important to distinguish the difference between choices and evaluations. Feeling right about a choice of behaviour, because it fits ones orientation and therefore can lead to beneficial outcomes, and the evaluation of the objects and events that are involved in the goal or activity are experienced separately. So when there is regulatory fit, positive objects and events will increase in positivity, whereas negative objects and events will increase in negativity. Therefore, choosing a strategy that fits an individual’s orientation may lead to a feeling right experience. However, the “feeling right’ does not derive from the choice being made having perceived the objects and events as matching the individuals orientation. Rather it is “feeling right” because the individual perceives it is the correct way of achieving their goals. For example, a beneficial effect of regulatory fit on mental health would not be derived from

the world becoming more positive but rather from a person's feeling that he or she is coping with the world in the right way (Avnet & Higgins, 2006b).

9.4 Contributions to the Current Theory & Research

The research programme described in this thesis makes four contributions to current retirement research and theory. This section will describe each contribution in turn and explain the potential benefits these have for extending our knowledge about the field of retirement.

The first contribution is the creation, for the first time, of a set of eager approach and vigilant avoidance retirement preparation strategies. Previous research has not attempted to produce a set of retirement preparation strategies. Ekerdt et al. (1996) did produce a taxonomy of retirement intentions that focused on factors such as intentions to stop working completely or reducing work gradually never a set of specific strategies that are distinguishable as eager approach and vigilant avoidance type. By employing RFT (Higgins, 1997, 2000), this new set of retirement preparation strategies will facilitate more extensive investigations of the personal procedural aspects of planning for retirement. The extension of this self-regulatory theory to the set of retirement preparation strategies offers countless opportunities for researchers to expand their research of retirement planning behaviours, satisfaction and adjustment to retirement and retirement preparation processes.

Results from this research programme demonstrate that chronically orientated individuals prefer strategies that are in-line with their chronic regulatory focus. Therefore, the second contribution is that RFT theory can add an additional layer of understanding to the type of strategies that individuals

choose when planning and preparing for retirement. By assessing an individual's regulatory focus specific strategies can be designed to suit the individual. This has implications for retirement counselling practitioners who work with individuals to help them plan effectively for their retirement.

The third contribution is that a fit between an individual's chronic regulatory orientation and the type of strategies chosen, impacts on their feelings regarding their impending retirement. This extends our understanding of how an individual can maximise the positive outcomes of the retirement process and minimise the negative outcomes. This helps to further explain retirement planning behaviours by demonstrating that the fit between individual differences and specific means of goal pursuit impacts on outcomes experienced by individuals in line with regulatory fit theory. For example, as expectancy theory (Vroom, 1964) proposes, individuals select options with the greatest motivational forces by maximising the Expectancy X Instrumentality X Valence of their choice of goals. When promotion focused individuals used the strategy of approaching matches to desired end states (by pursuing approach strategies with the highest expected utility), they maximised the product of Expectancy X Instrumentality. This led to less pre-retirement anxiety, more positive affect and less negative affect being reported by these individuals compared to those who pursued strategies that were not a match for their regulatory orientation. The implications of such a fit is that feeling right about how one is preparing for retirement is not limited to that one experience. In fact, the value of the experience spills over into other areas and later experiences after goal pursuit is completed. This is in line with Higgins et al's (2003) who demonstrated a transfer of value from regulatory fit. The benefits of pursuing strategies that sustain one's orientation during retirement preparations can impact on general wellbeing and satisfaction with life during this, potentially stressful life stage. This advances our understanding of the

contributing factors to positive retirement preparation beyond identifying what predicts retirement planning behaviours. In addition to this, the research reported here broadens our understanding of self-regulation and regulatory fit. In particular, it demonstrates the impact of a fit versus non-fit between individual's chronic regulatory focus and their means of goal pursuit, and that these don't always have a positive effect. The results of Study 3 show that when the relationship between chronic regulatory orientation and means of goal pursuit match, they result in an intensification of both positive and negative reactions. This has particular implications for individuals that are prevention focused and who pursue prevention type strategies, as they show more sensitivity towards the negative items contained in the measurements of anxiety and negative affect, despite the fit between their orientation and the type of strategies pursued.

The fourth and final contribution is that the research programme explores the impact of retirement preparation strategies on current feelings rather than on anticipated feelings. Previous research, which used predictive measurements has been associated with issues such as hindsight bias. For example, studies in the retirement research have relied on predictive measurements for anticipated retirement satisfaction to assess the impacts of various antecedents of retirement planning. Examining current feelings as against predictive measures removes the theoretical and conceptual issues of relying on individuals to think in to the future about what they might feel about their retirement. Study 3 utilised the social components of retirement anxiety (SCRAS) and the PANA Schedule to explore how individuals feel in the present about their impending retirement. This allows for a deeper understanding of the personal impact that retirement preparation has on individuals as they progress through the retirement process.

In summary, this research programme demonstrated the need to account for individual differences and their corresponding strategic inclinations while also attending to the full range of complex factors that influence the retirement process. The final model proposed suggests this could be achieved by applying a framework that includes these individual differences, inclinations and multifaceted features.

9.5 Limitations and Future Directions

A number of limitations need to be taken into account when considering the implications of this research. Firstly, the current research was carried out in both a public and a civil service organisation. The pension arrangements in these organisations are quite different from private organisations. There is also less ambiguity regarding retirement age as up until recently these were prescribed for most employees. Even now, the options for continued work past the traditional age of 65 is very limited. These factors can take a lot of the uncertainty out of retirement for the employees concerned and might contrast with the pre-retirement experiences of employees in the less predictable private sector. However, to help reduce any homogeneity effect, the approach taken to elicit the strategies in Study 1 was designed to create variability in the areas that concern individuals who are approaching retirement and not focus on retirement pensions. Previous research has shown that context is an important factor that can influence results and even provide outcomes that are contradictory to previous studies (Petkoska & Earl, 2009). For example, although age, gender, education and income have been identified as predictors of financial planning when employees of a financial institution filled out a retirement planning questionnaire, only age predicted financial planning (2009).

In this context, participants were likely to have more financial knowledge regardless of gender education or income. In this research, the individuals know exactly what pensions they will obtain on retirement and, therefore, when asked about financial strategies there were few references to actual pension arrangements. Future research should consider samples from a broader range of organisations, public and private to overcome any potential issues of homogeneity.

Secondly, the taxonomy of approach and avoidance strategies developed in this research was limited to the five areas identified by the current literature review. The large amount of data collected required the imposition of some constraints as the scope of the research did not allow for a very large set of strategies to be designed and tested. While these constraints may have limited the number of strategies in the final set, the design of the open ended questions ensured that they covered the range of factors that previous research has suggested as important for individuals approaching retirement. The final instrument designed to test these strategies was a forced choice design to indicate the difference between the number of promotion and prevention strategies chosen. While this was designed to replicate the approach taken in the study upon which this research was based (Higgins, 1997), it may have limited the number of inferences respondents made regarding the moderating effect reported in Study 3. Future research should consider other domains of retirement planning for inclusion in a similar instrument. It should also consider a rating scale so participant's scores on both dimensions could be captured and subsequently compared in alternative ways to their orientations and to the outcomes.

Thirdly, the set of strategies designed here was also only subjected to limited testing and would require further validation before it could be considered for the development of a reliable measurement of promotion and

prevention strategies. While a full validation process was not within the scope of this research programme, a multi-stepped validation process would be required if the set of strategies were to be considered for such an instrument and wider application.

In addition to the limitations posed, by the partial validation process carried out, the research presented here only carried out exploratory analysis of the impact of regulatory fit on pre-retirement anxiety and affect. The strategies developed in Study 1, while validated by the subject matter experts, do contain very subtle differences between what is categorised as promotion type and prevention type. These strategies were presented in a manner that preserved the integrity of both the methodology employed and that presented in the original research by Higgins (1997). More recent research has developed similar strategy scales for specific contexts and has employed more distinct differential promotion and prevention items (see Wallace et al., 2009 for example). Providing more distinct promotion and prevention items may allow individuals make more specific choices, rather than have to try to interpret unclear distinctions between what they would or would not normally choose.

The research presented here also very deliberately used a specific measure of regulatory focus, namely, the “General Regulatory Focus Measure Scale” from Lockwood et al. (2002). It was designed to tap into the reference point definition of regulatory focus as the research was interested in the goals and goal pursuit strategies individuals would choose to prepare for retirement. With the continuing interest shown in the current literature on regulatory focus, and the implications suggested by the results of the research carried out for this thesis, there may be greater opportunities to use different measures of regulatory focus depending on the context. For example, should future researchers want to explore specific retirement preparation practices in the work

place, then, employing the “Regulatory Focus at Work Scale” (Wallace et al., 2009) may be a more appropriate scale to use.

Also, other research, such as that carried out in the consumer and health literature, has employed different methodologies to test the impact of regulatory fit. For example, priming individuals to induce promotion and prevention mind sets, rather than measuring innate regulatory focus states, has been used to measure the impact of regulatory fit on purchasing behaviours (e.g., Lee et al., 2010) and engaging in health behaviours (e.g., Speiggle et al., 2004; Uskul et al., 2008). Designing priming material that relates specifically to retirement preparation strategies would allow alternative methodologies to measure the impact of regulatory fit on pre-retirement anxiety and affect.

Future researchers should also examine the relationship between regulatory orientation and the construction of self-report questionnaires. Results for the present research suggest that the ‘losses loom larger effect’ may be very relevant to the questionnaire development and item expression. The results of the moderation analysis found that when there was a match between a prevention orientation and a higher number of prevention strategies chosen, there appeared to be a heightened sensitivity to negative items in both the retirement anxiety scale and the negative affect scale, with both displaying the highest levels for all test conditions. Further research with different scales and an analysis at item level would be prudent to establish if the results here are indicating potential issues with measurement instruments in the wider field.

9.6 Practical Implications.

Having considered the contributions that this research programme has made to retirement research and theory and having discussed the limitations of

the research programme, this section will discuss some practical implications that the results observed here suggest.

This research thesis has focused on the pre-retirement phase and subsequent preparation for retirement through planning and goal pursuit strategies. It has been recognised that addressing issues such as negative attitudes and poor preparation can lead to better outcomes (Muratore & Earl, 2014). Understanding how individuals pursue retirement preparation goals offers a greater understanding of the impact that retirement preparation strategies have on pre-retirement anxiety and affect, which has implications for retirement preparation practitioners and counsellors. Counselling psychology researchers have been interested in the factors that affect adult development and adaptation. Payne, Robbins, & Dougherty (1991) for example, suggested that effective adaptation to life events such as retirement required an ability to maintain a sense of purpose and direction. From a sample of retirees, they found that high goal directed individuals were viewed as more outgoing and involved. Low goal directed individuals on the other hand were viewed as more self-critical, dissatisfied and solicitous of emotional support. Payne et al.'s (1991) study shows that retirement goals are an important factor in helping individuals to adjust to retirement. Results from the research programme reported in this thesis propose that how individuals pursue their goals should also be taken into consideration when designing interventions that help individuals prepare for retirement.

The retirement counsellor provides advice intended to help the individual to adjust to their changing circumstances as they enter retirement. The nature of this advice may vary and may even involve specific interventions designed to help individuals gain an awareness of specific areas that they should focus on. Some of these may be very practical, such as financial education programmes to help prepare for living on reduced incomes. Others may focus on the

psychological aspects of preparing for the changes associated with no longer working. Stones & Kozma (2012), for example, suggest that happiness is an important factor related to effective adjustment to life situations such as retirement. They propose that the theoretical and practical understanding of the happiness construct comprises an essential component of the counsellors' armoury.

As demonstrated by the results observed in this research programme, individuals who pursue retirement preparation strategies that sustain their regulatory orientation experience "feeling right" about their choices of goal pursuit means. This indeed led to reduced pre-retirement anxiety, negative affect and increased positive affect. These results suggest that retirement counsellors who provide specific interventions, both practical and psychological, could enhance their effectiveness by considering how these interventions might better match an individual's regulatory orientation. A recent concept paper by Ibrahim and Wahat (2015) suggests that "in formulating a strategy [for retirement] individuals need to assess the effectiveness of attitudes towards retirement preparation" (ibid, p. 157). They suggest that planning processes may not be clear in the beginning and there are always competing tasks that interfere with these processes. The retirement counsellor needs to employ all means to help individuals make their planning processes as effective as possible. While there are challenges to implementing interventions that require an understanding of the cognitive aspects of retirement preparation the result of this research thesis implies that practical tools for assessing attitudes and designing tailored approaches for individuals is possible. As suggested in the earlier section, on limitations and future research, future explorations of the impact of regulatory fit should examine different methodologies, which may assist in the development of these practical interventions.

Aside from retirement counsellors and psychologists the Human Resource (HR) departments of many companies are concerned with retirement. A recent study by Lee et al. (2016), identified patterns in HR approaches to retirement. The aim of the study was to explore innovative practices and to try and understand the way that firms deal with changes in retirement and workforce demographics. A number of firm types were suggested, which included “Gatekeeping; Improvising; Orchestrating; and Partnering”. The focus of these firms varied from concerns regarding costs of turnover of staff to knowledge and skill capacities and how to retain them. Descriptions of the typology of HR approaches that they developed included “communicating and educating” and “innovating and experimenting” (2016, p. 9). What firms are now realising is the need to try to retain skilled workers and that workers themselves either desire or need to stay in the workforce longer. The results from the research presented here, in tandem with the future research proposed in the previous section, can aid HR managers and departments enhance their communication and education programmes and can be part of the innovation and experimentation programmes being pursued by many more firms. As Lytle and colleagues (2015) stated “Retirement decisions involve a range of options beyond simply ceasing paid work, and career counselors and vocational psychologists need to consider a wide array of factors when assisting clients in making retirement decisions” (p. 179).

Another practical implication of this research programme suggests the need to consider regulatory orientations when designing measurements for assessing retirement outcomes and measurement instruments in general. Results from Study 3 in this research programme showed that prevention oriented individuals who pursued avoidance type strategies reported the highest levels of pre-retirement anxiety and negative affect. The explanation offered suggests that prevention oriented individuals may have been particularly sensitive to the

negative wording of the items that made up the two measurement instruments utilised by the research. According to RFT prevention oriented individuals are more sensitive to outcomes that are framed as a loss or a non-gain. An examination of the individual items that made up the Social Components of Retirement Anxiety Scale and the Negative Affect scale revealed such negative framing. The implications of these results is that while a prevention oriented individual may choose strategies that sustain their regulatory orientation and indeed may feel right about how they are pursuing their goals this may not translate into choosing more positively framed items in the subsequent outcomes measurements applied. The individuals sensitivity to negatively worded items may influence their choices on these outcomes scales. Researchers will need to design measurements to capture their desired outcomes while taking cognisance of the possible impact of negative wording.

9.7 Summary and Conclusion

This research programme examined the way individuals pursue retirement preparation strategies and demonstrated that applying a model of self-regulation to the study of retirement planning behaviours offers an opportunity to gain a deeper understanding of the processes underlying “how” individuals implement retirement preparation strategies. It tested the impact of two types of goal pursuit strategies on the feelings experienced by individuals approaching retirement. Results indicated that when individuals pursue strategies that sustain their regulatory orientation they experience less pre-retirement anxiety, less negative affect and more positive affect. These results have both theoretical and practical implications for researchers that are interested in exploring retirement planning, satisfaction and adjustment to retirement and retirement

preparation. They also suggest that retirement counsellors and practitioners could benefit greatly from adopting the approaches developed in this research programme to design more specific individual programmes for those approaching retirement. Designing programmes that fit an individual's regulatory orientation can help to extenuate the positive and alleviate the negative feelings associated with this important life stage.

Overall, the three studies addressed the gap identified in the literature review and showed that the application and adaptation of the regulatory focus and regulatory fit approach can lead to a greater understanding of the interaction between motivational orientation and means of pursuing retirement preparation goals. Results of Study 1 for example indicated that it is possible to differentiate retirement preparation strategies into distinguishable groups of approach and avoidance strategies. This will allow future research to examine retirement preparation strategies at an individual difference level. Results also demonstrate that a "fit" versus a "non-fit" between chronic orientation and the type of strategies pursued can improve outcomes for those approaching retirement. Results from Study 3 shows that GRFM Strength coupled with the type of strategies chosen explained significant variance in SCRAS, PA and NA respectively. Specifically, the type of strategies chosen significantly moderated the relationship between GRFM Strength and both SCRAS and NA. While this did not hold out for PA it still demonstrated that there is a value to pursuing strategies that sustains your chronic regulatory orientation. It is also suggested that this value may transfer to other areas after goal pursuit is completed. One unexpected result indicated that for chronic prevention orientated individuals a match might in fact exacerbate their negative reactions rather than decrease them. The implications of this specific finding for future research and the use of instruments that chronic prevention oriented individuals may be particularly sensitive to were discussed. In general the results from this research helps to

further explain the consequences of planning behaviours by demonstrating that a fit between individual differences and specific means of goal pursuit, as proposed by regulatory fit theory, does impact on outcomes such as anxiety and affect.

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Appendices

Appendix 1 Letter of Approval from DCU Research Ethics Committee

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University



Dr. Finian Buckley,
DCU Business School

4th July 2013

REC Reference: DCUREC/2013/153

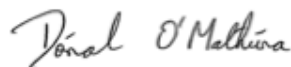
Proposal Title: **The Influence of Construal Levels and Time on the Self-Regulatory Processes of Individuals Approaching Retirement**

Applicants: Dr. Finian Buckley, Mr. Stephen FitzGerald

Dear Finian,

Further to expedited review, the DCU Research Ethics Committee approves this research proposal. Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. Should substantial modifications to the research protocol be required at a later stage, a further submission should be made to the REC.

Yours sincerely,

A handwritten signature in black ink, reading 'Donal O'Mathuna'.

Dr. Donal O'Mathuna
Chairperson
DCU Research Ethics Committee



Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

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Appendix 2 Email permission from Director General of Organisation 1

From: "O'Toole, Paul" <IMCEAEX>

Hi Stephen

My apologies for not coming back sooner.

In principle, I am happy to agree this survey. I think it will be important that the context is explained - i.e. your research rather than an official survey. I have copied XXXX and XXXXX on this communication and would ask that you formally check with them regarding any ICT or HR / IR matters or requirements.

Best regards

Paul

-----Original Message----- From: Fitzgerald, Stephen Sent: 19 December 2011 20:03 To: O'Toole, Paul Subject: FW: Short online survey Importance: High

Hi Paul I am really sorry to bother you again. I was just wondering if you had a chance to follow up on this request for me? I know you are really busy. I was just hoping that I would have some data to work on over the Christmas holidays. I sure you can appreciate that it is very difficult trying to do this type of study part-time and with the year that we have had it has been even more difficult for me personally to [...]

I would really appreciate a decision as soon as you can so I might get some data before people go on leave for Christmas.

Thanking you in anticipation. Happy Christmas to you and all your family. Stephen Fitzgerald

-----Original Message----- From: Fitzgerald, Stephen Sent: Mon 12/12/2011 5:17 PM To: O'Toole, Paul Subject: Short online survey Hi Paul

I am writing to you to ask your permission to circulate the email below to the DL Organisation 1 Subscribers distribution list. As you will see if you click any of the links below this survey is very short and I would really appreciate it if you could see your way in granting permission to let me circulate it. If you wish I can add in a sentence highlighting the IT email policy and request people to only respond

outside of normal business hours.

Thank you for taking the time to read this.

Stephen Fitzgerald

Hi Everyone

Seasons greetings. I appreciate that you are all busy at this time of the year and I do not want to impose too much on your valuable time. However I would really appreciate it if you could spare some time to complete a short online survey for me. This is part of my research into retirement strategies which I am carrying out as a contribution towards my Phd in Dublin City University under the supervision of Dr Finian Buckley. The survey is completely confidential and there is no way to identify any individual contributor. The questions are purely hypothetical and therefore do not require you to be near to retirement in order to complete them. What I would ask is that you complete all questions and then submit them by clicking "Done" at the end of the page.

There are a few different versions of the survey and to ensure that you are directed to a version in a random fashion I would ask that you please click on the colour below that most closely matches your favourite colour.

If you don't have the time right now the survey will be available until the end of the month should you get a chance to complete it at a later date.

Thank you for taking the time to read this email. I hope you all have a happy holiday.

Regards

Stephen Fitzgerald

Appendix 3 Invitation to participate in Study 1.

Hi Everyone

Seasons greetings. I appreciate that you are all busy at this time of the year and I do not want to impose too much on your valuable time. However I would really appreciate it if you could spare some time to complete a short online survey for me. This is part of my research into retirement strategies which I am carrying out as a contribution towards my Phd in Dublin City University under the supervision of Dr Finian Buckley. The survey is completely confidential and there is no way to identify any individual contributor. The questions are purely hypothetical and therefore do not require you to be near to retirement in order to complete them. What I would ask is that you complete all questions and then submit them by clicking "Done" at the end of the page.

There are a few different versions of the survey and to ensure that you are directed to a version in a random fashion I would ask that you please click on the colour below that most closely matches your favourite colour.

If you don't have the time right now the survey will be available until the end of the month should you get a chance to complete it at a later date.

Thank you for taking the time to read this email. I hope you all have a happy holiday.

Regards

Stephen Fitzgerald

Blue <<https://www.surveymonkey.com/s/>>

Red <<https://www.surveymonkey.com/s/>>

Yellow <<https://www.surveymonkey.com/s/>>

Orange <<https://www.surveymonkey.com/s/>>

Black <<https://www.surveymonkey.com/s/>>

Green <https://www.surveymonkey.com/s/>

Appendix 4 Survey Questions Study 1

1. Consent
This survey is completely anonymous.
☐ I agree to participate
☐ I do not agree to participate
Demographic Information
2. Gender
☐ Male
☐ Female
3. Age Bracket
☐ 18 to 30 years old
☐ 31 to 40 years old
☐ 41 to 50 years old
☐ 51 to 60 years old
☐ 61 to 70 years old
4. Grade
☐ Grade 13
☐ Grade 12
☐ Grade 11
☐ Grade 10
☐ Grade 9
☐ Grade 8
☐ Career Grade
☐ Grade 7
☐ Grade 6
☐ Grade 5
☐ Grade 4

As people plan for retirement they may think about certain strategies that will help them prepare for it. Strategies are the long term plans for achieving one's goals. The following questions are hypothetical. Please answer all questions in this section.

5. Imagine you are the type of person that believes it is important to avoid bad health in your retirement. What would your strategy be to achieve this goal?

6. Imagine you are the type of person that believes it is important to be in a good financial position when you retire. What would your strategy be to meet this goal?

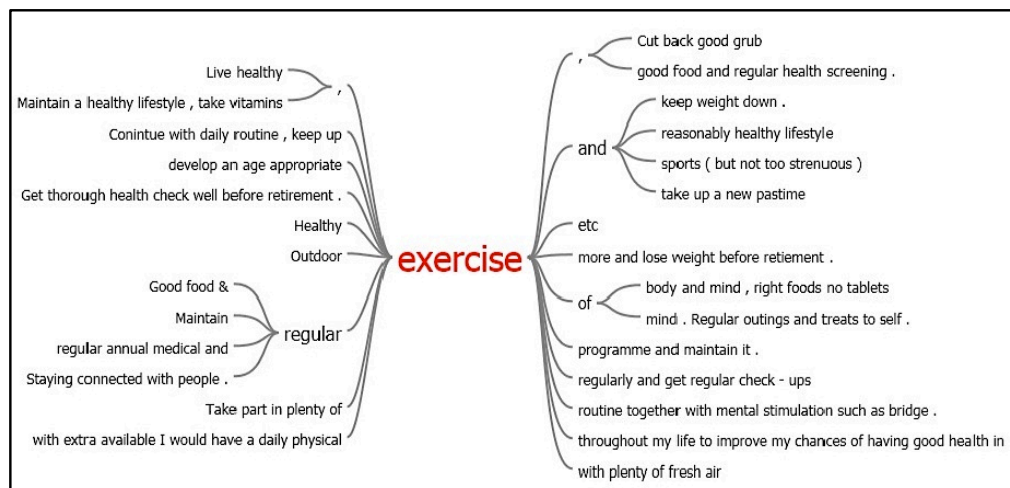
7. Imagine you are the type of person that believes it is important to remain active each day during your retirement. What would your strategy be to achieve this goal?

8. People's roles change in retirement. Imagine you are the kind of person that would like to use the opportunity to contribute to your local community. What would your strategy be to achieve this goal?

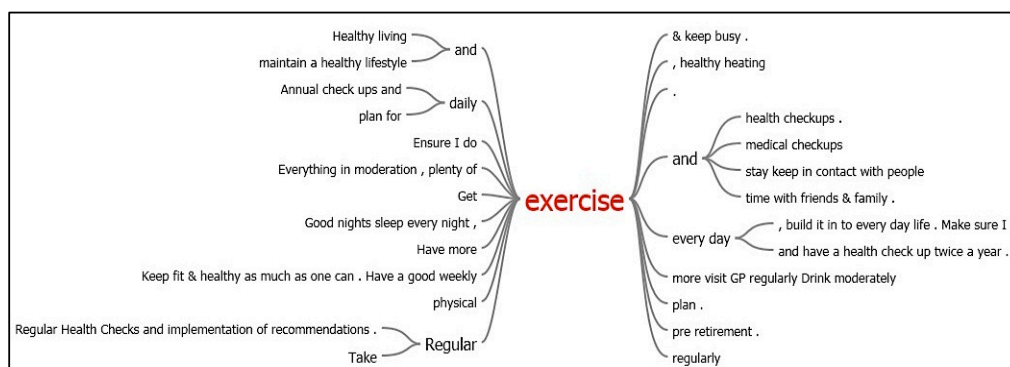
9. Imagine you are the kind of person that would like to keep working after retiring from your main job. What would your strategy be to achieve this goal?

Appendix 5 Example Word Trees

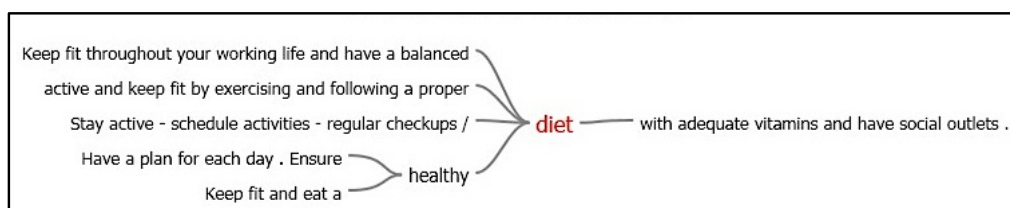
Question 5 Health: Approach Strategies for Exercise.



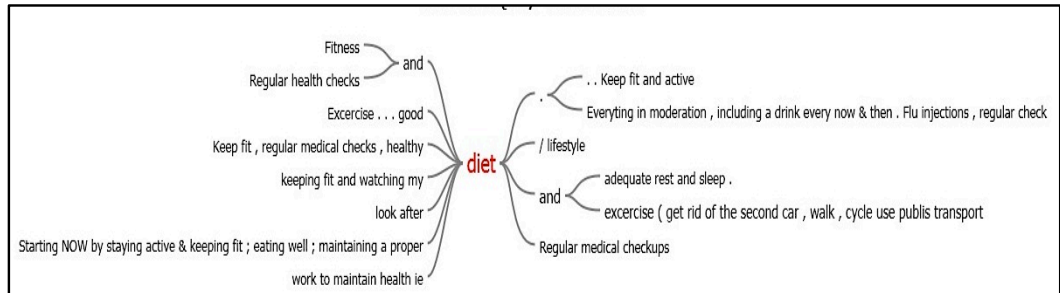
Question 5 Health: Avoidance Strategies for Exercise.



Question 5 Health: Approach Strategies for Diet.



Question 5 Health: Avoidance Strategies for Diet.



Appendix 6 Inter-rater Instructions.

Research Question:

The Influence of Construal Levels and Time on the Self-Regulatory Processes of Individuals Approaching Retirement.

Within the vast array of self-regulation research there is a sub theory called Regulatory focus. According to regulatory focus theory (Higgins, 1997, 1998), all goal-directed behavior is regulated by two distinct motivational systems. These two systems are termed promotion and prevention. The human promotion system is said to be based on hopes and aspirations to achieve accomplishment and advancement and it's concerned with the pleasurable presence of positive outcomes (i.e. gains) and the painful absence of positive outcomes (i.e. non-gains). In contrast, the human prevention system is said to be based on safety and fulfilment of obligations and responsibilities and its concerns relate to the pleasurable absence of negative outcomes (e.g., non-losses) and the painful presence of negative outcomes (e.g., losses). Therefore people with a chronic promotion focus should pursue strategies that are positive, proactive, optimistic, possible risky and about achieving outcomes that match their hopes and aspirations. In contrast, the strategies of prevention focused individuals are more cautious, avoiding failure, avoiding negative outcomes, a preference for maintaining stability and a tendency to say no or not to undertake an action so as to ensure they meet their obligations and duties.

An example of an Eager Approach strategy might be: "Because I wanted to be at school for the beginning of my 8:30 psychology class which is usually excellent, I woke up early this morning" (approaching a match to a desired end-state). Whereas an example of a Vigilant Avoid type strategy might be "I wanted to take a class in photography at the community center, so I didn't register for a class in Spanish that was scheduled at the same time" (avoiding a mismatch to a desired end-state).

My research is interested in when conflict occurs between individuals chronic regulatory focus and the strategies they pursue in relation to a particular event, "Retirement". According to Construal Level Theory (CLT) the same event or object can be represented at multiple levels (Trope & Liberman, 2003). CLT assumes that people mentally construe objects that are psychologically near in terms of low-level, detailed, and contextualized features therefore temporal proximity heightens individuals' sensitivity to potential impediments and the possibility of negative outcomes (Liberman and Trope 1998), whereas at a distance they construe the same objects or events in terms of high-level, abstract, and stable characteristics and thereby retain a more positive or optimistic attitude towards the object or event. I predict that as the retirement event draws closer individuals will adapt more vigilance avoidance type strategies despite their chronic regulatory focus. I intend to test this in a field study with individuals at 1,3 and 5 years from retirement and look at the effect of fit (between chronic regulatory focus and strategic approach) and non-fit on anticipated retirement satisfaction and self-reported health. In order to achieve this I have carried out a strategy elicitation study and produced a list of possible strategies that individuals may pursue in terms of health, finances, activity, contributing to their community and work when it comes to planning for retirement. I used a priming study to elicit both promotion and prevention strategies and I would like your

help to differentiate these into the two categories using the following statements to guide your choices.

Place the number **1** in the box for Category 1:

Eager Approach type strategy, which is reflective of **proactively** ensuring the **attainment** of **positive outcomes**.

OR

Place the number **2** in the box for Category 2:

Vigilant Avoidance type strategy which is reflective of being **cautious** and **avoiding negative outcomes** or **potential losses**.

Health	Category
Continue with or develop a healthy diet now.	
Have regular medical check ups to avoid any medical problems.	
Ensure to have adequate medical insurance.	
Participate in some form of exercise to increase fitness.	
Finance	Category
Save money or possibly invest to fund a better lifestyle.	
Don't take on additional debts. Pay off existing loans.	
Err with caution and put some money aside.	
Plan ahead and try to maximise my savings.	
Community	Category
Learn new skills so as to offer my services in a positive way for some community group	
Remain active in existing club/association as it is easier to continue if already involved	
Actively research and identify a group to see if my involvement would improve their current situation	
Build up involvement with a group slowly. Don't become over involved as may be difficult to step back	
Active	Category
Will have to look for a part-time job in order to supplement income.	
Will have to develop a hobby in case I get bored with current activities.	
Plan a structured day. Utilise time to achieve goals like gardening or reading.	
Develop skills and have plenty of hobbies, which can be continued or taken up.	
Work	Category
Look for part-time work in a niche area to avoid money shortages in retirement.	
Avail of training early to prevent my skills becoming out of date.	
Attend a course of training. Keep up with technology in order to work from home.	
Explore continuing similar work to my current career or retrain to do something else	

Appendix 7 Inter-rater Scores

Community	Category	Category	Category
	Rater 1	Rater 2	Rater 3
Learn new skills so as to offer my services in a positive way for some community group	1	1	1
Remain active in existing club/association as it is easier to continue if already involved	2	1	1
Actively research and identify a group to see if my involvement would improve their current situation	1	1	1
Build up involvement with a group slowly. Don't become over involved as may be difficult to step back	2	2	2
Finance	Category		
Save money or possibly invest to fund a better lifestyle.	1	1	1
Don't take on additional debts. Pay off existing loans.	2	2	2
Err with caution and put some money aside.	2	2	2
Plan ahead and try to maximise my savings.	1	1	1
Active	Category		
Will have to look for a part-time job in order to supplement income.	2	1	2
Will have to develop a hobby in case I get bored with current activities.	2	2	2
Plan a structured day. Utilise time to achieve goals like gardening or reading.	1	1	1
Develop skills and have plenty of hobbies, which can be continued or taken up.	1	1	1
Health	Category		
Continue with or develop a healthy diet now.	1	1	1
Have regular medical check ups to avoid any medical problems.	2	2	2
Ensure to have adequate medical insurance.	2	2	2
Participate in some form of exercise to increase fitness.	1	1	1
Work			
Look for part-time work in a niche area to avoid money shortages in retirement.	2	2	2
Avail of training early to prevent my skills becoming out of date.	2	2	2
Attend a course of training. Keep up with technology in order to work from home.	1	1	1
Explore continuing similar work to my current career or retrain to do something else	1	1	2

Highlighted text indicates disagreement between raters

Appendix 8 Kappa Rating

Calculating a Generalized Kappa Statistic for Use With Multiple Raters

Calculations based on equations presented in Fleiss (*Statistical Methods for Rates and Proportions*, 1981, pp. 229-232)

(Copyright © 2004, 2009 Jason King, Wallace Judd. All rights reserved. Available at <http://www.ccitonline.org/jking/homepage/kappa1.xls>)

Directions: Enter rating data in the *Rater1*, *Rater2*, *Rater3*, *Rater4*, and *Rater5* worksheets, as needed.

Edit the shaded numbers below to indicate the number of raters, items and categories.

Enter # of raters (m):

3

#NAME?

0.799

= Generalized Kappa for Rater 1, ... Rater n data

Enter # of items (n):

20

#NAME?

of categories (k):

2

The table below summarizes the data entered in the corresponding spreadsheets. Highlighting indicates areas of disagreement.

Items	CAT1	CAT2				
1	3	0				
2	2	1				
3	3	0				
4	0	3				
5	3	0				
6	0	3				
7	0	3				
8	3	0				
9	1	2				
10	0	3				
11	3	0				
12	3	0				
13	3	0				
14	0	3				
15	0	3				
16	3	0				
17	0	3				
18	0	3				
19	3	0				
20	2	1				

32

28

Sum_x²

Total # of ratings

6

6

168

=Prod_Cats

prop (p)

0.533

0.467

60

=Sum_Cats

BY CATEGORY

CAT1

CAT2

1

Row =
Cat_Props

num = sum_xi*(m-xi)

6

6

den = nm(m-1)pq

29.9

29.9

gen kappa_cat1 =

0.799

0.799

Appendix 9 Word Frequency Results

Word frequency results for question one on health

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Exercise 74%	Exercise 73%	Diet 57%	Diet 57%	Medical health insurance 27%	Medical health insurance 24%

Category 4		Category 5		Category 6	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Habits/hobbies 12%	Habits/hobbies 10%	Drink/smoke/ alcohol 10%	Drink/smoke/alcohol 8%	Stress 9%	Stress 7%

Word frequency results for question two on finance

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Pension plan 36%	Pension plan 27%	Saving/ investments 63%	Saving/ investments 58%	Budget planning management/Debt reduction 28%	Budget planning management/Debt reduction 28%

Category 4		Category 5	
Avoid	Approach	Avoid	Approach
Mortgage 8%	Mortgage 4%	Skills/ education/ part time job 6.5%	Skills/ education/ part time job 4.5%

Word frequency results for question three on activity

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Fitness, exercise 25.5%	Fitness, exercise 45%	Hobbies, clubs, groups 39%	Hobbies, clubs, groups 36%	Community and voluntary/ paid work 18%	Community and voluntary/ paid work 17%

Category 4		Category 5	
Avoid	Approach	Avoid	Approach
Routine 10%	Routine 5%	Social, Contact with friends and family 105	Social, Contact with friends and family 5%

Word frequency results for question four on community involvement

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Voluntary/Charity 31.5%	Voluntary/Charity 30%	Community/Local 40%	Community/Local 50%	Role in groups 9%	Role in groups 5%

Category 4		Category 5	
Avoid	Approach	Avoid	Approach

Social/family
interests 2%

Social/family
interests 1%

Educate, prepare or
train 1%

Educate, prepare or
train 5%

Word frequency results for question five on working

Category 1		Category 2		Category 3	
Avoid	Approach	Avoid	Approach	Avoid	Approach
Full/Part time work/business 27%	Full/Part time work/business 31%	Voluntary/community 30%	Voluntary/community 16%	Home improvements	Home improvements 1.5%
Category 4		Category 5			
Avoid	Approach	Avoid	Approach		
Develop hobbies 6%	Develop hobbies 4%	Education/reskilling 13%	Education/reskilling19%		

Results given as percentage of respondents for particular condition that included the words in their responses

Appendix 10 Permission from CEO of Org 2.

From: O'Toole, Paul
Sent: 12/11/2013 11:37
To: DL-Org 2-SUBSCRIBERS
Subject: Message from Stephen Fitzgerald re Survey

Dear Colleagues

Please find below request to participate in a Survey from former colleague, Stephen Fitzgerald, now of Department of XXX.

Kind regards
Paul O'Toole
CEO
Org2, Street, Dublin

Hi everyone. Some of you may remember carrying out a short survey for me a couple of years ago. It was part of my contribution towards a PhD with Dublin city University under the supervision of Dr Finian Buckley from the Business School. I was overwhelmed by the response I received and I collected a large amount of rich data. It has taken me this time to distil this data down and I need your help again to verify the outcomes I came up with. I would really appreciate it if you could spare me the time to complete another very short survey to help me achieve this. The survey is made up of three parts and each part should take no longer than 5 minutes to complete. If you would like to take part please click on the link below or copy and paste the URL into your browser. Many thanks. <https://www.surveymonkey.com/s/PrepforFuture>

Regards Stephen Fitzgerald

Welcome to the survey on Preparing for the Future

Dear Participant

Because of the likelihood of influencing the results I am asking you to approach this survey without full access to the explanation of the objectives as research has shown that this may affect the answers to certain questions.

At the end of the questionnaire, I will explain fully the reasons for this with regard to the question construction.

The survey is made up of three parts and each part should take no longer than 5 minutes to complete.

If you agree to continue please click yes and you will be directed to the first part of the survey.

End of survey for Completers

Thank you for participating in this survey.

You have been involved in a study to investigate the following hypothesis:

It is believed that individuals actively pursue goals in order to achieve desirable outcomes. For example if the desired outcome is to be healthy we may pursue the goal of losing weight to achieve it. There has been a lot of research that suggests how we pursue these goals and the type of strategy that we engage in to achieve the particular goals may vary. One suggestion is that we either proactively pursue goals to achieve positive outcomes, for example take up jogging to lose weight, or cautiously avoid negative outcomes from goals pursued for example avoid eating fatty foods to lose weight. This theory also suggests that we are predisposed to behave in either of these two ways. This is called our regulatory focus.

This project is interested in the type of strategies individuals pursue to achieve happiness and good health in retirement. It will investigate if there is any relationship between individuals' regulatory focus (their tendency to either proactively pursue goals to achieve positive outcomes or cautiously avoid negative outcomes from goals pursued) and the retirement strategies they choose. It will look at the consequences of pursuing strategies that are not necessarily in line with our predisposed way of pursuing goals.

You have been involved in an important stage of this study, which was designed to test if the strategies you were asked to choose were separable into two different groups.

If participants have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University

Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000

End of survey for Non-Completers

Thank you for taking the time to look at this survey.
I am sorry you were not in a position to continue with it at this time.
If you find the time at a later date please follow the original link to take the survey.

If you have any questions about the survey or my research you can contact me at
the following email address: stephen.fitzgerald@dcu.ie

Thank you again

Stephen Fitzgerald

Appendix 12 Survey for Study 2

Preparing for the future
Welcome to the survey on Preparing for the future
<p>Dear Participant</p> <p>Because of the likelihood of influencing the results I am asking you to approach this survey without full access to the explanation of the objectives as research has shown that this may affect the answers to certain questions.</p> <p>At the end of the questionnaire, I will explain fully the reasons for this with regard to the question construction.</p> <p>The survey is made up of three parts and each part should take no longer than 5 minutes to complete.</p> <p>If you agree to continue please click yes and you will be directed to the first part of the survey.</p> <p>1. Would you like to continue to the survey?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
Demographic Information
<p>Before continuing to the survey questions can you please fill out the following demographic information.</p> <p>This will not be used to identify any individual contributor.</p> <p>*2. What is your gender?</p> <p><input type="radio"/> Female</p> <p><input type="radio"/> Male</p>

Preparing for the future

*3. Which category below includes your age?

- ☐ 18-20
- ☐ 21-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60 or older

*4. Which of the following best describes your personal income bracket?

- ☐ 0 to 20,000 per annum
- ☐ 21,000 to 30,000 per annum
- ☐ 31,000 to 40,000 per annum
- ☐ 41,000 to 50,000 per annum
- ☐ 51,000 to 60,000 per annum
- ☐ 61,000 to 70,000 per annum
- ☐ Over 70,000 per annum

Part One:

Part one of this survey consists of 18 statements that are designed to get you to consider the present and the future. If the statement reflects the way that you think then rate it as a 7 Very true of me. If the statement does not reflect how you think then please rate it as a 1 Not very true of me. Try to avoid the rating of 4 Neither true or not true of me if at all possible.

Preparing for the future

***5. Using the scale below please rate each of the following statements from 1 Not at all true of me to 7 Very true of me.**

	(1) Not at all true of me	(2)	(3)	(4) Neither true or not true of me	(5)	(6)	(7) Very true of me
My major goal right now is to avoid becoming a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often imagine myself experiencing bad things that I fear might happen to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently imagine how I will achieve my hopes and aspirations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I typically focus on the success I hope to achieve in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I am focused on preventing negative events in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more oriented toward preventing losses than I am toward achieving gains.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often worry that I will fail to accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as someone who is primarily striving to become the self I "ought" to be to fulfill my duties, responsibilities, and obligations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about the person I would ideally like to be in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently think about how I can prevent failures in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am more oriented toward achieving success than preventing failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as someone who is primarily striving to reach my "ideal self"—to fulfill my hopes, wishes, and aspirations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I am focused on achieving positive outcomes in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about the person I am afraid I might become in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about how I will achieve success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My major goal right now is to achieve my lifelong ambitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often imagine myself experiencing good things that I hope will happen to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am anxious that I will fall short of my responsibilities and obligations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part Two:

Thank you for completing part one. Part two is just a short number of general questions about movies. Just to remind you your answers to this section and all others cannot be identified with you.

6. How often do you watch movies ?

7. Out of all the movies you have ever seen, which is your favourite?

8. Who is your favourite movie star living today?

9. Who do you think is the most poorly behaved movie star living today?

Preparing for the future

Part Three

Thank you for completing part two.

Part three is a six-part questionnaire that requires you to choose two out of four possible answers. There are no wrong answers in this part as we are interested in what strategies individuals might choose in preparation for the future.

As you will see there are many strategies that can be pursued to achieve the same goal.

Please choose the two that you believe would be the best option for you and your circumstances.

***10. When you think about preparing for FINANCIAL SECURITY in the future which TWO of the following strategies would you choose to pursue now to prepare for it?**

- ☐ Don't take on additional debts. Pay off existing loans.
- ☐ Plan ahead and try to maximise my savings.
- ☐ Err with caution and put some money aside.
- ☐ Save money or possibly invest to fund a better lifestyle.

***11. When you think about preparing for HEALTH in the future which TWO of the following strategies would you choose to pursue now to prepare for it?**

- ☐ Have regular medical check ups to avoid any medical problems.
- ☐ Participate in some form of exercise to increase fitness.
- ☐ Ensure to have adequate medical insurance.
- ☐ Continue with or develop a healthy diet now.

Preparing for the future

*** 12. When you think about WORKING after retirement which of the following TWO strategies would you choose to pursue now to prepare for it?**

- ☐ Explore continuing similar work to my current career or retrain to do something else
- ☐ Attend a course of training. Keep up with technology in order to work from home
- ☐ Look for part time work in a niche area to avoid money shortages in retirement
- ☐ Avail of training early to prevent my skills becoming out of date

*** 13. When you think about REMAINING ACTIVE in the future which TWO of the following strategies would you choose now to prepare for it?**

- ☐ Will have to look for a part time job in order to supplement income
- ☐ Develop skills and have plenty of hobbies, which can be continued or taken up
- ☐ Will have to develop a hobby in case I get bored with current activities
- ☐ Plan a structured day. Utilise time to achieve goals like gardening or reading

*** 14. When you think about how you might CONTRIBUTE TO YOUR COMMUNITY in the future which TWO of the following strategies would you pursue now to prepare for that?**

- ☐ Actively research and identify a group to see if my involvement would improve their current situation
- ☐ Remain active in existing club/association as it is easier to continue if already involved
- ☐ Build up involvement with a group slowly. Don't become over involved as may be difficult to step back
- ☐ Learn new skills so as to offer my services in a positive way for some community group

Preparing for the future

***15. When you think about preparing for your future LIFESTYLE which TWO of the following strategies would you pursue now to prepare for that?**

- ☐ Spend sensibly now to retain current standard of living.
- ☐ Stay in touch. Don't lose contact with friends.
- ☐ Join some form of club to increase circle of friends.
- ☐ Get the life work balance right as early as possible.

End of survey

Thank you for participating in this survey.

You have been involved in a study to investigate the following hypothesis:

It is believed that individuals actively pursue goals in order to achieve desirable outcomes. For example if the desired outcome is to be healthy we may pursue the goal of losing weight to achieve it. There has been a lot of research that suggests how we pursue these goals and the type of strategy that we engage in to achieve the particular goals may vary. One suggestion is that we either proactively pursue goals to achieve positive outcomes, for example take up jogging to lose weight, or cautiously avoid negative outcomes from goals pursued for example avoid eating fatty foods to lose weight. This theory also suggests that we are predisposed to behave in either of these two ways. This is called our regulatory focus.

This project is interested in the type of strategies individuals pursue to achieve happiness and good health in retirement. It will investigate if there is any relationship between individuals' regulatory focus (their tendency to either proactively pursue goals to achieve positive outcomes or cautiously avoid negative outcomes from goals pursued) and the retirement strategies they choose. It will look at the consequences of pursuing strategies that are not necessarily in line with our predisposed way of pursuing goals.

You have been involved in an important stage of this study, which was designed to test if the strategies you were asked to choose were separable into two different groups.

If participants have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000

Thank You

Thank you for taking the time to look at this survey.

I am sorry you were not in a position to continue with it at this time.

If you find the time at a later date please follow the original link to take the survey.

If you have any questions about the survey or my research you can contact me at the following email address: stephen.fitzgerald@dcu.ie

Thank you again

Stephen Fitzgerald

Appendix 13 Correlation Matrix for General Regulatory Focus Measure for Study 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. In general, I am focused on preventing negative events in my life.	-																	
2. I am anxious that I will fall short of my responsibilities and obligations.	.322**	-																
3. I frequently imagine how I will achieve my hopes and aspirations.	.308**	.215**	-															
4. I often think about the person I am afraid I might become in the future.	.201**	.422**	0.138	-														
5. I often think about the person I would ideally like to be in the future.	0.121	.226**	.445**	.311**	-													
6. I typically focus on the success I hope to achieve in the future.	0.098	0.137	.543**	0.039	.477**	-												
7. I often worry that I will fail to accomplish my goals.	.304**	.595**	.352**	.434**	.326**	.292**	-											
8. I often think about how I will achieve success.	.223**	.189**	.670**	0.082	.481**	.657**	.286**	-										
9. I often imagine myself experiencing bad things that I fear might happen to me.	.228**	.446**	.188**	.466**	.163*	0.083	.442**	0.12	-									
10. I frequently think about how I can prevent failures in my life.	.290**	.448**	.305**	.395**	.271**	.180*	.504**	.240**	.388**	-								
11. I am more oriented toward preventing losses than I am toward achieving gains.	.343**	.394**	0.125	.329**	.202**	0.004	.320**	0.076	.323**	.390**	-							
12. My major goal right now is to achieve my lifelong ambitions.	.190**	0.074	.504**	.175*	.476**	.562**	.210**	.565**	0.03	0.133	0.029	-						
13. My major goal right now is to avoid becoming a failure.	.422**	.418**	.258**	.509**	.333**	.146*	.518**	.245**	.410**	.473**	.394**	.216**	-					
14. I see myself as someone who is primarily striving to reach my "ideal self"—to fulfill my hopes, wishes, and aspirations.	0.11	0.111	.457**	0.105	.519**	.558**	.144*	.612**	0.036	0.138	0.1	.554**	.221**	-				
15. I see myself as someone who is primarily striving to become the self I "ought" to be to fulfill my duties, responsibilities, and obligations.	.166*	.338**	.341**	.313**	.502**	.407**	.348**	.456**	.294**	.355**	.215**	.387**	.325**	.513**	-			
16. In general, I am focused on achieving positive outcomes in my life.	.244**	0.066	.361**	-0.131	.184**	.378**	-0.017	.365**	-.157*	0.014	-0.028	.378**	-0.051	.365**	.189**	-		
17. I often imagine myself experiencing good things that I hope will happen to me.	.219**	.142*	.531**	0.122	.455**	.359**	.212**	.422**	.185**	.298**	.232**	.335**	.244**	.453**	.274**	.361**	-	
18. Overall, I am more oriented toward achieving success than preventing failure.	0.124	0.04	.405**	-0.04	.325**	.497**	0.106	.494**	-0.062	0.035	-0.055	.390**	0.109	.488**	.319**	.455**	.234**	-

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Appendix 14 Survey for Study 3.

The following pages contain version A of the survey for Study 3. Version B,C, and D contained the exact same questions and scales but were presented in a different order. Questions 1 to 14 were the same in all versions of the survey. The order of questions 15 to 48 was determined by the answer to question 14.

Regulatory Focus and Retirement Strategies.

Welcome

Do you intend to retire within the next ten years? If you do then I need your help.

My name is Stephen Fitzgerald and I am currently carrying out Doctoral Research which is investigating retirement and wellbeing among older workers.

The research is interested in the type of strategies individuals pursue to achieve happiness and good health in retirement. It will look at the consequences of pursuing strategies that are not necessarily in line with our natural approach to pursuing goals, which is known as our Regulatory focus.

This study is being carried out as part of the Doctoral Research Programme at Dublin City University Business School under the supervision of Dr Finian Buckley.

None of the answers given in any part of this study can be identified with any individual. You may choose at any point to discontinue.

A fuller explanation of the research question will be provided at the end of the survey.

The survey is made up of four main parts and each part should take no longer than 6 minutes to complete.

If you agree to continue please click yes and you will be directed to the first part of the survey.

1. Would you like to continue to the survey?

☐ Yes



☐ No

Demographic Information

Before continuing to the survey questions can you please fill out the following demographic information.

This will not be used to identify any individual contributor.

***2. What is your gender?**

-  Female
-  Male

***3. What age are you now?**

11/11/2019

Page 10 of 10

***4. What age do you intend to retire at?**

11/11/2016

***5. Which of the following best describes your current total household income (Gross before deductions)?**

- ☐ 0 to 20,000 per annum
- ☐ 21,000 to 40,000 per annum
- ☐ 41,000 to 60,000 per annum
- ☐ 61,000 to 80,000 per annum
- ☐ 81,000 to 100,000 per annum
- ☐ Over 100,000 per annum

***6. Current Satisfaction with Health:**

Please rate the following statements from 1 Completely agree to 7 Completely disagree.

[illegible]

***7. Which of the following best describes your current marital status?**

- ☐ Married/Partnered (spouse/partner working)
- ☐ Married/Partnered (spouse/partner not working)
- ☐ Divorced/Separated
- ☐ Unmarried
- ☐ Widowed

8. Do you have any dependent children at the moment?

- ☐ Yes
- ☐ No

9. If you answered yes to question 8 above please indicate the number of dependent children and the age of the youngest child.

If no then please continue to the next question.

Number of Dependent Children

Age of Youngest Child

***10. Which of the following best describes your current occupation?**

- ☐ Professional/Technical
- ☐ Civil or Public Service
- ☐ Managerial
- ☐ Production/Service
- ☐ Education
- ☐ Customer Service
- ☐ Sales/Clerical
- ☐ Skilled
- ☐ Semi-skilled
- ☐ Construction
- ☐ Farming, Fishing, Forestry
- ☐ Labourer

11. About how long have you been in your current position?

Years

Months

***12. What is the highest level of education you have completed?**

- ☐ Did not complete any formal exams
- ☐ Intermediate/Junior Certificate/O Levels
- ☐ Leaving Certificate/A Levels
- ☐ Post Leaving Certificate
- ☐ Diploma
- ☐ Undergraduate Degree
- ☐ Post Graduate Masters Degree
- ☐ PhD

Part One: A

Part one of this survey consists of 18 statements that are designed to get you to consider the present and the future. If the statement reflects the way that you think then rate it as a 7 Very true of me. If the statement does not reflect how you think then please rate it as a 1 Not very true of me. Try to avoid the rating of 4 Neither true or not true of me if at all possible.

***13. Using the scale below please rate each of the following statements from 1 Not at all true of me to 7 Very true of me.**

[illegible]

14. Which of the following colours do you like best?

☐ Red

☐ Blue

☐ Green

☐ Yellow

Part Two: A

Any behaviour can be identified in many ways. For example, one person might describe a behavior as "typing a paper," while another might describe the behaviour as "pushing keys." Yet another person might describe the behaviour as "expressing thoughts."

We are interested in your personal preferences for how a number of different behaviours should be described. Below you will find several different behaviours listed.

After each behaviour will be two choices of different ways in which the behaviour might be identified. Here is an example:

Attending a class:

Identified as either (a) Sitting in a chair OR (b) looking at the blackboard

Your task is to choose the identification, a or b, that best describes the behaviour for you.

Of course, there are no right or wrong answers.

People simply differ in their preferences for the different behaviour descriptions, and we are interested in your personal preferences.

Remember, choose the description that you personally believe is more appropriate in each pair.

*15. Making a list

- ☐ Getting organized ☐ Writing things down

*16. Reading

- ☐ a. Following the lines of print ☐ b. Gaining knowledge

*17. Joining the Army

- ☐ a. Helping the Nation's defense ☐ b. Signing up

*18. Washing clothes

- ☐ a. Removing orders from clothes ☐ b. Putting clothes into the machine

*19. Picking an apple

- ☐ a. Getting something to eat ☐ b. Pulling an apple off a branch

*20. Chopping down a tree

- ☐ a. Wielding an axe ☐ b. Getting firewood

*21. Measuring a room for carpeting

- ☐ a. Getting ready to remodel ☐ b. Using a measuring tape

*22. Cleaning the house

- ☐ a. Showing ones cleanliness ☐ b. Vacuuming the floor

***23. Painting a room**

- ☐ a. Applying brush strokes ☐ b. Making a room look fresh

***24. Paying the rent**

- ☐ a. Maintaining a place to live ☐ b. Writing a cheque

***25. Caring for house plants**

- ☐ a. Watering plants ☐ b. Making the room look nice

***26. Locking a door**

- ☐ a. Putting a key in the lock ☐ b. Securing the house

***27. Voting**

- ☐ a. Influencing the election ☐ b. Marking a ballot

***28. Climbing a tree**

- ☐ a. Getting a good view ☐ b. Holding on to branches

***29. Filling out a personality test**

- ☐ a. Answering questions ☐ b. Revealing what you're like

***30. Tooth brushing**

- ☐ a. Preventing tooth decay ☐ b. Moving a brush around one's mouth

***31. Taking a test**

- ☐ a. Answering questions ☐ b. Showing one's knowledge

***32. Greeting someone**

- ☐ a. Saying hello ☐ b. Showing friendliness

***33. Resisting temptation**

- ☐ a. Saying "no" ☐ b. Showing moral courage

***34. Eating**

- ☐ a. Getting nutrition ☐ b. Chewing and swallowing

***35. Growing a garden**

- ☐ a. Planting seeds ☐ b. Getting fresh vegetables

***36. Traveling by car**

- ☐ a. Following a map ☐ b. Seeing the countryside

***37. Preventing a cavity**

- ☐ a. Protecting your teeth ☐ b. Going to the dentist

***38. Talking to a child**

- ☐ a. Teaching a child something ☐ b. Using simple words

***39. Pushing a doorbell**

- ☐ a. Moving a finger ☐ b. Seeing if someone's home

Part Three: A

Thank you for completing part two.

Part three begins with a five-part questionnaire that requires you to choose TWO out of four possible answers. This is followed by two more short questionnaires.

There are no wrong answers in this part as we are interested in what strategies individuals might choose in preparation for their retirement.

As you will see there are many strategies that can be pursued to achieve the same goal.

Please choose the TWO that you believe would be the best option for you and your circumstances.

***40. When you think about preparing for FINANCIAL SECURITY in your retirement which TWO of the following strategies would you choose to pursue now to prepare for it?**

- ☐ Save money or possibly invest to fund a better lifestyle.
- ☐ Plan ahead and try to maximise my savings.
- ☐ Err with caution and put some money aside.
- ☐ Don't take on additional debts. Pay off existing loans.

***41. When you think about preparing for HEALTH in your retirement which TWO of the following strategies would you choose to pursue now to prepare for it?**

- ☐ Participate in some form of exercise to increase fitness.
- ☐ Ensure to have adequate medical insurance.
- ☐ Have regular medical check ups to avoid any medical problems.
- ☐ Continue with or develop a healthy diet now.

***42. When you think about WORKING after retirement which of the following TWO strategies would you choose to pursue now to prepare for it?**

- ☐ Avail of training early to prevent my skills becoming out of date
- ☐ Explore continuing similar work to my current career or retrain to do something else
- ☐ Attend a course of training. Keep up with technology in order to work from home
- ☐ Look for part time work in a niche area to avoid money shortages in retirement

***43. When you think about REMAINING ACTIVE in your retirement which TWO of the following strategies would you choose now to prepare for it?**

- ☐ Plan a structured day. Utilise time to achieve goals like gardening or reading
- ☐ Develop skills and have plenty of hobbies, which can be continued or taken up
- ☐ Will have to develop a hobby in case I get bored with current activities
- ☐ Will have to look for a part time job in order to supplement income

***44. When you think about how you might CONTRIBUTE TO YOUR COMMUNITY in your retirement which TWO of the following strategies would you pursue now to prepare for that?**

- ☐ Build up involvement with a group slowly. Don't become over involved as may be difficult to step back
- ☐ Learn new skills so as to offer my services in a positive way for some community group
- ☐ Actively research and identify a group to see if my involvement would improve their current situation
- ☐ Remain active in existing club/association as it is easier to continue if already involved

***45. I would like you to take a moment to reflect on the choices you just made with regards to strategies that you would choose to prepare for retirement. I would also ask you to think about the last time you thought about retirement and what it would mean to you. These thoughts probably give rise to feelings and emotions about how retirement will affect you. The following list contains words that describe a range of emotions and feelings. Please read each item and indicate to what extent you feel this way when you think about your impending retirement..**

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***46. Below are five statements with which you may agree or disagree with. On a scale of 1 to 7 please indicate your level of agreement with each statement. Please be open and honest with your answers.**

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In most ways my life is close to my ideal.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part Four: A

This final section is also about retirement. This time we are interested in your thoughts about the consequences of retiring.

Please read each of the statements carefully and if you strongly agree with the statement please rate it a 1. If you strongly disagree with the statement then please rate it a 5. Try to avoid a 3 where possible.

*47. Please rate the following statements which ask you to think about the consequences of your impending retirement.

	1.Strongly Agree	2. Agree	3.Neither agree or Disagree	4.Disagree	5.Strongly Disagree
I can't imagine not working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of my friends have been my co-workers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am too old to make new friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid I will be a burden on my family as a retired person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keeping up with my friends will be difficult.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will probably be sitting around alone after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid I will feel lonely after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid I will lose all my work friends as a retired person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After retirement, I am not sure I will know how to stay involved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have already made plans for what I am going to do as soon as I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There really isn't much for a retired person to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that my family will not support me after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't know what I am going to do without my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have lots of friends I can depend on if I need them after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I won't have much in common with my co-workers anymore.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retirement will allow me to do things with friends that I wasn't able to do while I was working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retirement will give me new opportunities to make new friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job has always been a source of my identity. I hate to lose that.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Many of my colleagues will not have time for me after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family does not want me to retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retirement will not bother me because I am sure I can make new friends no matter where I go.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People will never call on me to do things with them after I retire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It will be hard to replace my friends from work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7 Completely Disagree

[illegible]

End of survey

Thank you for participating in this survey.

You have been involved in a study to investigate the following research question:

It is believed that individuals actively pursue goals in order to achieve desirable outcomes. For example if the desired outcome is to be healthy we may pursue the goal of losing weight to achieve it. There has been a lot of research that suggests how we pursue these goals and the type of strategy that we engage in to achieve the particular goals may vary. One suggestion is that we either proactively pursue goals to achieve positive outcomes, for example take up jogging to lose weight, or cautiously avoid negative outcomes from goals pursued for example avoid eating fatty foods to lose weight. This theory also suggests that we are predisposed to behave in either of these two ways. This is called our regulatory focus.

This project is interested in the type of strategies individuals pursue to achieve happiness and good health in retirement. It will investigate if there is any relationship between individuals' regulatory focus (their tendency to either proactively pursue goals to achieve positive outcomes or cautiously avoid negative outcomes from goals pursued) and the retirement strategies they choose. It will look at the consequences of pursuing strategies that are not necessarily in line with our predisposed way of pursuing goals.

Thank you for taking part in this very important research. If you are interested in learning some more about this area or this research in particular please contact Stephen Fitzgerald at stephen.fitzgerald@dcu.ie

Equally if you have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000

Thank you again

Stephen Fitzgerald

Thank You

Thank you for taking the time to look at this survey.
I am sorry you were not in a position to continue with it at this time.
If you find the time at a later date please follow the original link to take the survey.

If you have any questions about the survey or my research you can contact me at the following email address: stephen.fitzgerald@dcu.ie

Thank you again

Stephen Fitzgerald

