The psychological effects of considering a move into residential care:
An age-related study

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1   ABSTRACT

This study aimed to examine the psychological effects of considering a move into residential care. It sought to explore the wistful 'prefactual' and 'counterfactual' evaluation of 'what if' and 'if only' scenarios. Sanna, Carter, and Small's (2006) 'Time, Environment, Motivation, Personality, and Outcome' (TEMPO) model was applied to investigate whether individuals moving closer in time to a prefactual scenario (a hypothetical vignette about two older adults facing a move towards residential care) express increased prefactual/counterfactual statements. Additional hypotheses explored the impact of personality and outcome (mood as input) factors on prefactual/counterfactual statement generation.

This study employed a naturalistic experimental design. The main grouping variable was each participant's life stage (working-age adults or older adults). These two groups were selected to represent two distinct stages along the TEMPO timeline. The dependent variable involved the number of written prefactual/counterfactual statements. In total, 33 working-age adults and 33 older adults completed the study. Each wrote what they thought could be better or worse about each character's position in the prefactual scenario. They also completed relevant demographic information and information about personal circumstances, along with a range of personality measures.

Independent-Samples T Tests revealed a significantly higher number of prefactual/counterfactual statements generated by the older adult group for the prefactual scenario. Effect sizes were medium to large. However, tests of personal scenarios, and the effects of personality and outcome did not reach significance. The implications of these findings, in relation to research and clinical work, were discussed. This was particularly in relation to furthering the investigation of prefactual and counterfactual generation and in relation to the significant emotional implications of considering a move away from independent living. The limitations of this research were discussed and related to future research possibilities, particularly concerning the potential impact of prefactual and counterfactual thinking on behaviour.

The psychological effects of considering a move into residential care: An age-related study

"Look in my face; my name is Might-have-been; I am also called No-more, Too-late, Farewell." (Dante Gabrielle Rossetti, 1828-1882)

2   INTRODUCTION

The psychological effects of an individual beginning to consider a move away from independent living and towards some form of supported housing are largely unknown. Studies of such decision making often conclude that in an uncertain state of mind, people are highly vulnerable to suggestion. However, much of the time, they also remain unaware that they have been subjected to such influence (Laming, 2004).

In terms of a move away from independent living, there is a distinct paucity of knowledge of how individuals attempt to process such a significant life event. The self-regulation literature might suggest that individuals would evaluate such change in accordance with whether they are meeting the basic needs of 'nurturance' or 'survival' (Higgins & Spiegel, 2004). Typically, needs of nurturance are more focused on accomplishment, advancement, and aspiration. In contrast, a survival outlook would involve more of a prevention focus that is concerned with protection, safety, and security (Higgins & Spiegel, 2004). Such a focus can be an important consideration in terms of how people come to review their choices in life. For example, those with a nurturance (promotion focus) are likely to consider what might have happened had one taken a different course of action. On the other hand, those with a survival (prevention) outlook are more likely to consider what might have happened had one *not* taken a particular action (Higgins & Spiegel, 2004).

There is also very little known about the potential for life review processes that can be generated from how an individual might come to meet future housing needs. Certainly, the potential for life review is relatively clear in relation to times where one is faced with a major crisis, important decision, or the prospect of ill health and

death (Garland & Garland, 2001). The wistful evaluation of 'what if' or 'if only' when reflecting over one's life and all that has been achieved, or all that has been missed, can be an important consideration for an individual contemplating their future independence and housing needs.

2.1 Rationale for the study

This introduction will begin with defining the notion of counterfactuals (these 'if only' musings) and regret and the relationship between them. The relationship between regret counterfactuals and mental health will then be explored. Subsequently, the management of regret counterfactuals across the lifespan, and also through a move from independent living, will be discussed. Finally an introduction to the 'Time, Environment, Motivation, Personality, and Outcome' (TEMPO) model (Sanna, Carter, & Small, 2006) will be presented to provide an understanding of mental simulations over time.

This introduction will conclude with an outline of the hypotheses to be tested in this study. For the purposes of this research, Internet database searches were conducted through use of Psychinfo, APA PsycNET DIRECT, PubMed, Google, and Google Scholar. The key-terms used were primarily set to include *old age*, *elderly*, *regret*, *mental health*, *counterfactual*, *residential home*, and *nursing home* in order to identify relevant publications for this research. Reference sections of published articles were also searched and all relevant books and articles followed-up.

2.2 The relationship between counterfactuals and regret

In order to discuss the relationship between counterfactuals and regret it is first necessary to define and explore the two concepts.

2.2.1 *Counterfactuals*

Roese (1997) defines counterfactuals as mental representations of alternative scenarios to past reality. The term *counterfactual* literally means 'contrary to the facts' (Roese, 1997), with counterfactual thinking being typified by thoughts of "if

only," "at least," or "what if" (Sanna, Carter, & Burkley, 2008). It is believed that such counterfactual thinking can produce consequences that are either beneficial (e.g. in the role of self-improvement or future preparation) or aversive (e.g. rumination and worry) to the individual that construes them.

2.2.1.1 Counterfactuals and Cognition

As the above might suggest, those who dwell on 'what might have been', that is, on *counterfactual* versions of the past, are likely to experience an intense sense of loss, regret, and despair (Roese, 1997). This is most likely to be the case where an individual directly compares highly valued alternative scenarios with the position they find themselves facing in the present.

2.2.1.2 Classification of Counterfactuals

Roese (1997) indicates that a useful sub-classification of counterfactuals depends on their direction of comparison. That is to say counterfactuals may present alternative scenarios where the comparison is better than reality (i.e. *upward* counterfactuals) or where the comparison is worse than reality (i.e. *downward* counterfactuals). For example, 'Bill' looks back at his journey to work. He can think that it could have gone better (e.g. "If only I had left 10-minutes earlier I wouldn't have missed my train") or that it could have gone worse (e.g. "At least there were no closures on the line today so I still made good time"). It has often been proposed that upward counterfactual thinking forms the basis for self-improvement and future goal setting, while downward counterfactual thinking is believed to offer emotional comfort (e.g. Medvec, Madey, & Gilovich, 1995).

2.2.1.3 Origins of Counterfactual Thinking

Originally, the majority of psychological interest in counterfactual thinking stemmed from Kahneman and Tversky's (1982) discussion of the *simulation heuristic*. This essentially refers to the process by which people 'run through' possible alternative scenarios or outcomes to a particular event. Kahneman and Tversky (1982) argue that the simulation heuristic plays a crucial role in counterfactual thinking. The imagined alternatives can have direct implications for an individual's thoughts, feelings, and behaviours. From an evolutionary sense, generating these

alternatives also has survival implications for our future wellbeing. As Sanna, et al (2006) argue, the process by which reality is compared with imagined alternatives might be 'personal' (e.g., "If only I had studied harder at school I'd have a better job"), 'whimsically scientific' (e.g., "What if the planets no longer orbited the sun?"), or 'historical' (e.g., "At least our country developed a state pension"). In general, it would appear that in consideration of history, many statements and events carry counterfactual implications and the ability to think counterfactually could arguably form an essential component of the human condition (Sanna, et al, 2006).

2.2.1.4   A model of counterfactual generation

Figure 1: A two-stage model of counterfactual generation (Roese & Olson, 1995a)
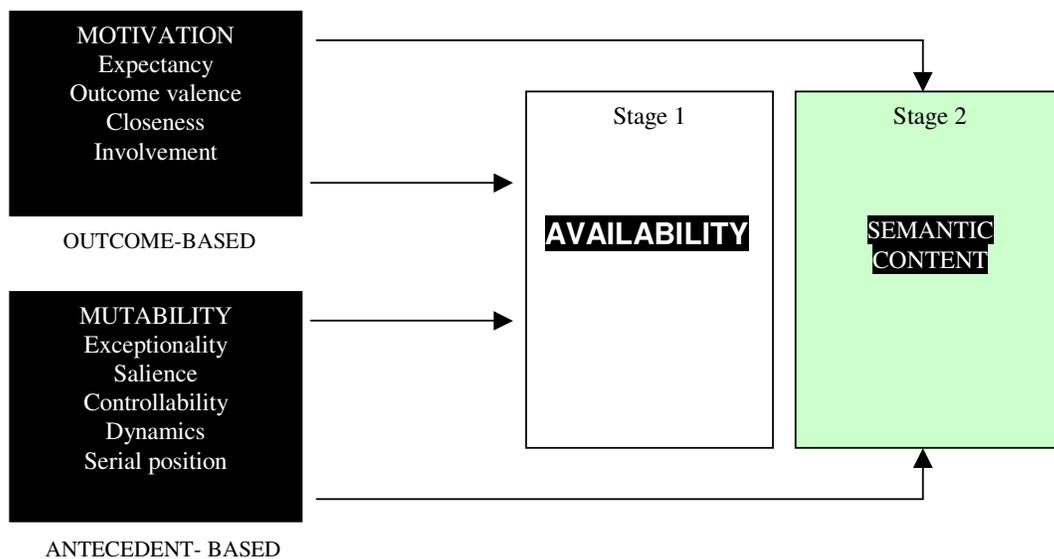
According to Roese and Olson's (1995a) two-stage description (Figure 1), the initial drive for counterfactual generation comes from the unexpected or negative nature of the outcome itself (e.g. being late for the train). This motivates a reconsideration of the possible avoidance of that outcome based upon an almost passive 'bringing to mind' of exemplars; a mere consideration that a factual outcome might not have occurred (stage 1). In general, the availability of such exemplars is based on judgements of frequency, since frequent events are easier to imagine than infrequent ones (Tversky & Kahneman, 1973). Thus, outcome based motivational factors drive the engine for counterfactual thinking (Roese & Olson, 1995a).

Subsequently, the controllability of the antecedent (here, knowing one could have left 10-minutes earlier) is embraced as one means by which the outcome could have been avoided (stage 2). Thus, semantic content refers to the specification of the means by which some alternative outcome might have arisen (Roese & Olson, 1995a). Variables reflecting the mutability (the ease by which an event might be mentally undone or altered) of antecedents are therefore considered to predict the semantic content of the subsequent counterfactual (Roese & Olson, 1995a). In general, it would seem that out of the ordinary events are seen as easier to mutate back to normality than altering normal events to the exceptional (Markman, Klein, & Suhr, 2009).

In Roese and Olson's (1995a) model (Figure 1) there are two classes of variables thought to affect stages 1 and 2, as outlined above. Firstly, motivational variables can influence either availability or semantic content. These variables are outcome based in that they reflect descriptions of the target outcome, e.g. whether it is positive or negative (outcome valence) (Roese & Olson, 1995a). By and large, motivation refers to an impulse to avoid negative stimuli and to approach gratifying stimuli (Roese & Olson, 1995a). Other motivational variables, here included in Figure 1, incorporate expectancy factors (cognitive attempts to obtain understanding and mastery over one's environment), closeness (to a more desired alternative outcome), and involvement (whether the outcome has the potential to affect the individual personally) (Roese & Olson, 1995a).

Mutability variables can also influence stages 1 and 2, but these are antecedent based. They reflect descriptions of antecedents leading up to the target outcome, e.g. whether the antecedent was seen as routine or exceptional (exceptionality) (Roese & Olson, 1995a). Other mutability variables, referenced in Figure 1, include salience (prominence of the antecedent), controllability (whether direct alterations to the antecedent could be made), dynamics (fluctuating aspects of reality being more likely to be mentally varied than static), and serial position (whether there is a serial chain that triggers a causal sequence of events) (Roese & Olson, 1995a).

2.2.2 *Regret*

Sometimes when confronted with a bad outcome, people blame themselves and think that if only they had acted differently this outcome would have been better (Zeelenberg, van den Bos, van Dijk, & Pieters, 2002). Regret is a common experience for most individuals. Indeed, a study conducted by Shimanoff (1984) revealed that regret was the second most frequently named emotion in conversation, coming second only to love. In terms of how we construe regret, it might be argued that regret is a hybrid of emotion and cognition. In order to *feel* regret we need to *think*, e.g. about one's choices and the outcomes, and possible alternative outcomes, generated by those choices (Zeelenberg & van Dijk, 2005).

Living a life without accumulating any regrets would be incredibly difficult to accomplish. As Gilovich and Medvec (1995) highlight, a lifetime of decision-making brings with it the realisation that perhaps some choices we made were poorly conceived, and some failures to act unwise. Interestingly, it appears to be these latter *errors of omission* that typically produce more regret in the long-term. However, in the short-term it appears to be our actions that most stimulate regret (Gilovich & Medvec, 1995). Although personal judgement is fairly central to our experience of regret, regret inevitably comes loaded with feeling and is therefore considered to qualify as a true emotion (Gilovich & Medvec, 1995). It may not operate as a 'gut-level' primary emotional response, but it does qualify as a secondary emotion in that it occurs secondary to other, more primary, internal processes (Greenberg, 2008), for example, feeling regret at one's sadness, fear, or anger in a past situation. Certainly, as we advance in age, it is conceivable for us to imagine that with increased life-experience could also come a lure to look back over our lives with thoughts of what might have been had different paths been taken.

2.2.3 *The relationship between counterfactuals and regret*

Most of us can relate to some feeling of regret when choosing to buy a certain item when out shopping, only to find it cheaper or better somewhere else. Or we may experience a feeling of regret at not pursuing a particular career decision that we later see would have paid off far better than the position we are left facing.

Examples such as these serve to highlight how people often compare their chosen course of action with a possible outcome of an unchosen path – a counterfactual alternative.

Zeelenberg (1999) highlights that, apart from the regret that might be experienced in retrospect about a decision, people can also take a prospective approach and imagine the *anticipated regret* they are likely to feel if they make a particular decision. Wong and Kwong (2007) suggest that it is this experience of anticipated regret that potentially holds a key role alongside retrospective evaluations of how we make decisions. Indeed, it is possible that these characteristics may create the same neural patterning and emotional arousal as the real thing. This might be likened to the function of mirror neurons, which discharge both when a specific movement is performed and when it is observed (Blakemore & Decety, 2001).

Wrosch, Bauer, and Scheier (2005) discuss how throughout life people are faced with making adaptive decisions in pursuit of personal goals, and how these decisions shape the course of their lives. However, in the event that these chosen paths do not fit with current needs or desires any individual might begin to reflect on their lives and regret not pursuing alternative paths. Kahneman (1995) and Roese (1997) highlight that severe life regrets typically involve the experience of counterfactual thoughts. On life-review, this might take the form of, for example, "If only I had…" or "What might have happened if…" In Zeelenberg, et al's, (2002) study, they emphasise the finding that perceived inaction was often more regrettable than action directly taken. As previously mentioned, this is also supported by Gilovich and Medvec's (1995) assertion that inaction is typically more likely to generate regret in the longer-term. It seems that feelings of regret following action or inaction are typically stimulated by prior decision outcomes (i.e. outcomes, events, or experiences that occurred earlier). Where a negative prior decision outcome occurs, tendencies to act are promoted in order to prevent further loss. Consequently, failures to act would be more regretted in this scenario (Zeelenberg, et al, 2002). Thus, it appears that 'the path not taken', that which might be referred to as the 'counterfactual pathway', would seem to present individuals with the greatest cause for long-term regret experiences.

2.3   Regret counterfactuals

2.3.1 *Impact on mental health*

Counterfactual thinking is closely tied to emotional experiences.   Since counterfactual generation often focuses on how things could have gone better, by way of a contrast effect, they often intensify negative affect (Roese & Olson, 1997). The negative affect that can arise from such counterfactual thinking has been linked with depression and other coping difficulties (e.g. Davis & Lehman, 1995). This can be particularly apparent if an individual were to ruminate excessively over how they might have acted differently with regards to avoiding a particular negative outcome.

The observation that counterfactual thinking serves a functional purpose is not new.   Indeed, Galinsky, Liljenquist, Kray, and Roese (2005) highlight the importance of counterfactual thinking for healthy mental and social functioning, as underscored by observations of those suffering from brain disorders or mental health problems, such as Parkinson's and schizophrenia.   In such cases, counterfactual thinking is found to be more impaired than other cognitive skills and, in both conditions, some degree of dysfunction of the prefrontal cortical areas of the brain are implicated (Reading, 1991).   In light of such findings, it is now widely thought that the ability to generate and make counterfactual inferences could be a barometer of frontal lobe capacity (Wong, Galinsky, & Kray, 2009).

Torges, Stewart, and Nolen-Hoeksema (2008) highlight that those individuals who hold unresolved regrets experience lower levels of mental well-being than those individuals who find ways to resolve their regrets.   Indeed, counterfactuals can be punishing, leading to obsessive mental undoing and highly disabling ruminations (Davis & Lehman, 1995).   Those who ruminate over their regrets are far more likely to report reduced life satisfaction and experience more difficulty in coping with negative life events (Schwartz, Ward, Monterosso, Lyubormirsky, White, & Lehman, 2002).   Interestingly, such a reported decrease in happiness and increase in depression is also likely in individuals who see themselves as having experienced a lifetime full of viable choices.   Such people often see that any

unacceptable result is their fault since, with so many choices available, a satisfactory outcome should be easily attainable (Schwartz, et al, 2002).

Certainly, the experience of mental distress resulting from ruminating over 'what might have been' can present us with understandable discomfort. Roese and Hur (1997) highlight that negative emotions appear to offer an initial trigger in the activation of counterfactual thinking. Once activated, Medvec, et al (1995) identified that counterfactuals can, in turn, generate further negative affect. An example they discuss in their research is the evidence that bronze medal Olympians generally tend to be happier than silver medal Olympians. Medvec, et al, (1995) make the point that for the silver medallist, the most vividly accessible counterfactual alternative is often how they might have won the gold (upward counterfactual thinking). However, for the bronze medallist, a highly accessible counterfactual alternative is finishing without a medal at all (downward counterfactual thinking). As highlighted in Roese, Hur, and Pennington's (1999) study, it would appear that our emotional well-being is deeply entwined with counterfactual thinking.

2.3.2 *Across the lifespan*

There are surprisingly few studies that have looked at how regret experiences might change across the lifespan (Torges, et al, 2008). Consequently, it might be fruitful to extrapolate from related studies to determine how regret counterfactuals might alter as we advance in age. Gilovich and Medvec (1994) highlight that the further removed we are from an event, the more we are able to convince ourselves that we would have handled it well. However, they suggest that it might be harder to remain so self-assured when the event is imminently at hand. This could, for example, hold some relevance for the most significant life-events (such as starting a family, house and job moves, etc.) both in the past and in the future. The further an individual is away from a challenge, the less threatening it appears (Gilovich & Medvec, 1994) and the more we might convince ourselves that we could, or should, have handled it well. For events far off in the future, we may be more likely to experience heightened confidence in the outcome (Gilovich, Kerr, & Medvec, 1993).

Wrosch, et al (2005) found that older adults reported fewer opportunities to 'undo' the consequences of their most regretted actions or inactions in comparison to young adults. Their study also revealed that the negative effects of regret intensity on the indicators of quality of life (e.g. subjective well-being and health) increase with age. This, they suggest, implies that the experience of intense regret becomes most troublesome in old age. By contrast, the effects of regret on younger people might be negligible since a younger person might remain more optimistic that there will be favourable opportunities to overcome the regret in later years (Wrosch, et al, 2005). Certainly, it is feasible to imagine that there may be fewer opportunities for successful goal completion as we advance in age. At least, this may appear to be the case in a pragmatic sense. However, even feeling encouraged and able to try for desired goals might make people feel better about their efforts, whatever their age. Indeed, Lyubomirsky, Sheldon, and Schkade (2005) argue that intentional activity, that is activity that people choose to engage with and invest effort in (e.g., striving to meet important personal goals) is associated with positive well-being. This is particularly the case where these activities or aspects of them remain varied. However, to what extent people feel able to remain engaged with varied activities in older age would depend on a range of individual circumstances.

2.3.3 *The Positivity Effect*

It has been proposed by some researchers that old age is considered a time of great wellbeing. Erskine, Kvavilashvili, Conway, and Myers (2007) propose that repressive coping and reduced cognitive capacity, i.e. through everyday activities taking up greater cognitive resources in old age (Kvavilashvili & Fisher, 2007), could make old age a time of great contentment. This notion also follows in support of Mather and Carstensen's (2005) findings that as we get older we tend to process positive emotions better than negative ones. They have referred to this as 'the positivity effect'. Carstensen, Isaacowitz, and Charles (1999) argue that anxiety and depressive disorders typically involve a dread of dire future scenarios that might be realised. They suggest that with advancing age comes an awareness of limited time, which focuses the mind more on the present with little concern for what may or may not happen in the future (Carstensen, et al, 1999). In cases of psychopathology, Carstensen, et al (1999) also propose that there could

be therapeutic gains from focusing the older client's mind more on the present and on their current emotional goals.

To what extent such increased positivity and wellbeing in old age is the case remains uncertain. Pasupathi, Carstensen, and Tsai (1995) presented research suggesting that relationships and intergenerational communication with older adults discourages their independence. It appears that society generally upholds certain culturally influenced stereotypes relating to patterns of relationships and interactions with older people, for example, that generally underpin the social construction of ageing (McCann, Dailey, Giles, & Ota, 2005). Pasupathi, et al (1995) argue that discriminatory behaviour towards older adults shows a failure to treat them as thoughtful, intelligent, experienced, and independent people. Adopting an ageist attitude appears to accelerate feelings of diminished capacity (Lott & Maluso, 1995) within a society that appears to view old age as of little use. If we begin to factor in issues such as dissociation and some basic principles of evolutionary psychology, we might find that it is merely unhelpful to attend to information where you consider yourself powerless. Indeed, one of the central postulates of learned helplessness theory is that if the individual learns they cannot *control* external circumstances, in which advancing age, loss, or declining health might be counted, depression and passive resignation may emerge (Gilbert, 1992). Certainly, Parnell (2005) found that feelings of loneliness and helplessness were common responses to the realised losses associated with a move to institutional living. The powerlessness in question concerned an inability to make choices in daily living as adjustments were made to residential culture.

There is also a significant amount of evidence concerning mental health problems and functional decline among older adults (e.g. Rigler, Studenski, Wallace, Reker, & Duncan, 2002). Older people that are affected by adverse life changes, such as illness and bereavement, are likely to experience a significant and negative impact on mood. They are also likely to find these events occurring in close proximity to a need for significant adjustments to their living arrangements. A study by Stilwell and Kerslake (2004), investigating reasons for older people choosing some form of residential care, found that 78% of the cases they looked at involved admission to a care home following a critical event. Of this percentage, 25% of admissions

involved bereavement and 46% involved a hospital admission for illness or injury (Stilwell & Kerslake, 2004). Furthermore, only one of the 15 clients they interviewed (7%) had made an active decision to enter residential care (Stilwell & Kerslake, 2004). With such challenging and potentially traumatic situations in mind, it would seem that further consideration of the positivity effect is necessary, particularly in relation to how it might be managed over time and in changing scenarios.

2.3.4 *A move from independent living*

Jongenelis, Pot, Eisses, Beekman, Kluiter, and Ribbe (2004) concluded in their study that depression in the nursing home population was very high, typically three to four times higher than among community-dwelling older people. Furthermore, Jongenelis, et al (2004) highlighted how depression and other mental health issues are frequently not recognised and are often poorly treated within nursing home environments. Haight, Michel, and Hendrix (1998) identified that relocation to a nursing home environment places frail older adults at greater risk of developing depression and suicidal ideation. It has also been suggested that suicidal ideation is more common in residents of long-term care facilities than among community dwelling older adults, particularly among those most recently admitted (e.g. Scocco, de Girolamo, & Pavan, 2006). It is possible that such findings about the proximity to such a significant life-event might be linked with Kahneman and Tversky's (1982) observation that the closer in time one is to a specific scenario (e.g. a move to some form of supported living) the easier it is to imagine how things could have gone differently. This may also link with our understanding of the temporal order effect, in which it is suggested that people typically create counterfactual alternatives by making minimal changes to their current mental representations of reality (Byrne, 2005). This typically means that the most recent events are those we are most likely to mentally 'undo', or mutate, by considering minimal changes to the antecedents.

2.4 The Time, Environment, Motivation, Personality, and Outcome (TEMPO) Model

Perhaps a useful way to begin looking at the apparent relationship between proximity to significant life-events and the generation of counterfactuals is by referring to a temporally based model, such as the TEMPO model (Sanna, et al, 2006). Whilst acknowledging previous interest in how counterfactuals might be generated (e.g. Roese & Olson, 1995a), Sanna, et al (2006) suggest that the TEMPO model places counterfactuals into a broader integrative framework of mental simulations over time. This includes thoughts about the past, present, and future. Sanna, et al (2006) explain that it incorporates prior theorising (e.g. comparisons over time or contrasts with reality, goals, and motives). It also offers an expansion of the imagination, goals, and affect (IGoA) model (e.g. Sanna, Stocker, & Clarke, 2003; Figure 2), whilst perhaps more explicitly incorporating the specific roles of time, environment, motivation, personality, and outcome. Certainly, it would seem that the broad structure of the IGoA model is apparent within the TEMPO model (Figure 3).

Figure 2: The imagination, goals, and affect (IGoA) model over time *(taken from Sanna, et al, 2003)*
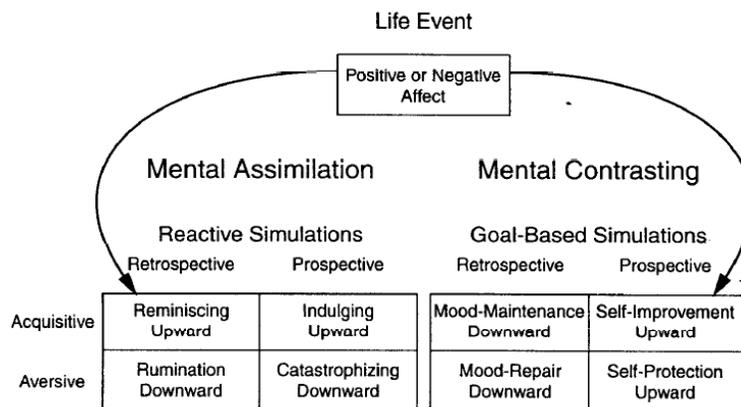
The TEMPO model offers a useful framework to investigate theorised regret counterfactuals over time, for example, in the case of a move away from independent living. Each aspect of the model will now be discussed, although, for

the purposes of this study, a slightly simplified application of the model (Figure 4) will be proposed.

Figure 3: The Time, Environment, Motivation, Personality, and Outcome (TEMPO) model (Sanna, et al, 2006)
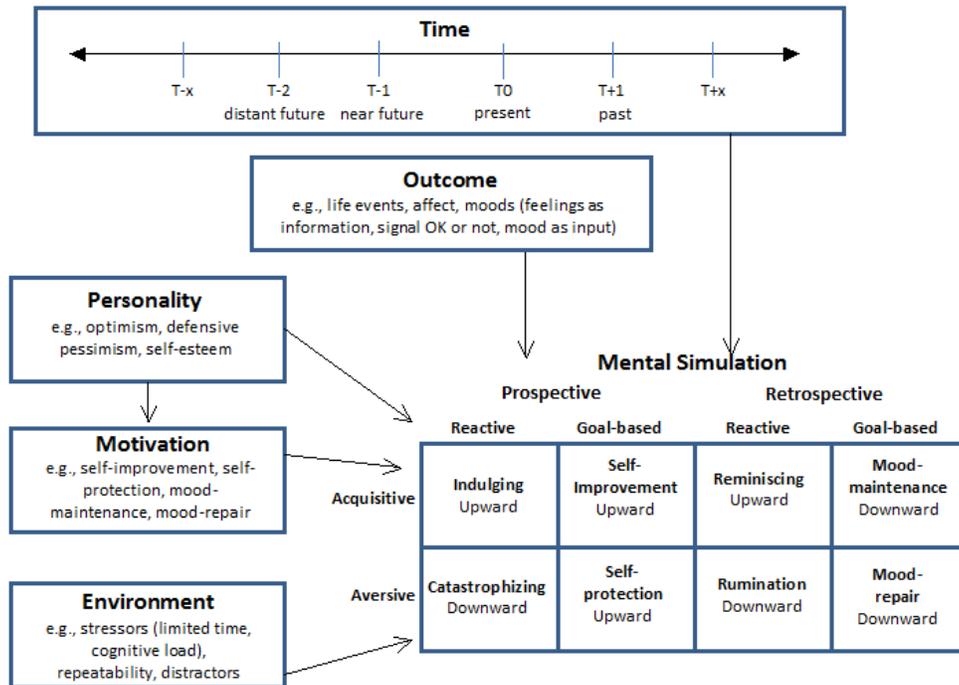
2.4.1 *Time*

Within the confines of any given situation, we have a limited amount of time to achieve our goals. The way in which mental simulations might differ over time is highlighted in Figure 3 (above). Sanna, et al (2006) propose that these temporal simulations range from future (T-X, T-2, T-1, etc.) to present (T0) to past (T+1, T+x, etc.). As the above suggests, mental simulations can differ by temporal perspective to take the form of retrospective (*counterfactual*) or prospective (*prefactual*) statements. Retrospective simulations focus more on what 'might have been' in any given situation whereas prospective simulations look towards 'what may be' (Sanna, et al, 2006).

Gilovich, et al (1993) found that being removed in time from some challenging event, such as sitting an exam, tended to make the person more self-assured that the event would pass with relative ease. Thus, it would seem that the further one

is from a significant event, both in the future and in the past, the less threatening it appears. Gilovich, et al (1993) argue that there appears to be a systematic relationship between our confidence that a desired outcome will be realised and our temporal proximity to the critical moment in question. Further to this, Shepperd, Findley-Klein, Kwavnick, Walker, and Perez (2000) demonstrated that people have a tendency to brace for the worst by reducing their confidence in success over time. They suggest that any individual might brace in anticipation of an event that is regarded as offering potential for loss, provided their need is great enough and the event is considered as high impact (Shepperd, et al, 2000).

Based on the remit of this thesis, it is plausible to hypothesise that a move into supported housing, and any perceived loss of independence, could reflect both high need and high impact. This may particularly be the case if the move also followed critical events such as loss of a spouse or carer, on top of losing one's home. For such individuals, it appears that it is better to feel prepared for the worst rather than be caught off guard and feel disappointed. Consequently, Sanna, et al (2006) argue that there is perhaps a tendency towards more upward self-protective mental simulations from T-2 to T-1.

2.4.2 *Environment*

Sanna, et al (2006) argue that both positive and negative life events and moods (T0) trigger simulations of a particular direction, i.e. upward or downward. These simulations are proposed to inform people's automatic and controlled responses, along with their coping and well-being (Sanna, et al, 2006). The TEMPO model proposes that feelings influence reactive simulations in a mood-congruent manner. While bad moods might frequently generate upward counterfactuals, and good moods frequently produce downward counterfactuals (Sanna, Chang, & Meier, 2001), McMullen (1997) demonstrated that under certain conditions upward counterfactuals could lead to positive affect and downward counterfactuals could lead to negative affect. This process is described as *affective assimilation* – that is, the simulations either do not involve contrast with a present state or they represent possibilities that the individual believes will or can transpire (Sanna, 2000).

In a similar way, Sanna, et al (2003) propose that good moods can sometimes lead to upward simulations, for example, leading us to reminisce over our upward, or positive, thoughts of the past. Furthermore, bad moods can sometimes lead to downward simulations, for example, depression often involving rumination over past events with focus on the negatives (Sanna, et al, 2003).

The TEMPO model suggests that feelings can influence perceptions of the present in a direct manner. Sanna, et al (2006) argue that goal-based simulations involve mental contrasting with present reality. Mood maintenance is an understandable reaction to positive feelings. Self-improvement, self-protection, and mood repair are related to negative feelings (Sanna, et al, 2001). Sanna, et al (2006) discuss that one implication of this is the impact of environmental stressors such as limited time or cognitive load. When the simulations activated by feelings (upward for negative, downward for positive) match those in Figure 3, responses are thought to be automatic. When there is a mismatch, responses are slow and effortful (Sanna, et al, 2001). Sanna, et al (2001) found that individuals placed under time pressure produced quick upward and downward counterfactuals in both bad and good moods, consistent with that activated by their mood. Sanna, et al (2006) argue that this match-versus-mismatch idea might extend to groups and organisations put under environmental pressure or constraints. Thus it might be expected that, under time constraints, the use of mental assimilation strategies become perhaps more limited.

2.4.3 *Motivation*

Sanna, et al (2006) propose that mental simulations can be *goal-based* or *reactive*, depending on whether there are clear underlying motives or not. Some simulations are motivationally based, for example, engaging with mood-repair in the face of failure (Sanna, et al, 2001). Other mental simulations appear to occur without much premeditation or purpose. An example of this might include daydreaming (Klinger, 1978).

Mental simulations can also be *acquisitive* or *aversive*. Acquisitive simulations refer to obtaining or retaining something that is good or positive (Arkin & Shepperd, 1989); e.g. reminiscing over the glory of triumphant sporting wins. In terms of

'regulatory focus' acquisitive simulations might also be viewed as promotion focused (Higgins, 1998), i.e. a focus more on accomplishment, advancement, and aspiration. Aversive simulations, by contrast, are more geared towards avoiding or protecting against negatives (Baumeister, Tice, & Hamilton, 1989), for example, imagining how an exam score might have been far worse had one not used a study guide. Aversive simulations might also be viewed as prevention focused (Higgins, 1998). The use of both acquisitive and aversive simulations is proposed to embrace the ideal of approaching and maintaining pleasure (Pennington & Roese, 2003).

2.4.4 *Personality*

Sanna, et al (2006) propose that personality characteristics may be linked to counterfactuals and other mental simulations. They argue that this can also be linked to particular motivations. Defensive pessimists, for example, are individuals who benefit from adopting a negative outlook for upcoming performances (Cantor & Norem, 1989). Such individuals acknowledge past success in a given situation, yet they approach such situations 'expecting the worst'. Their approach is strategic because it apparently serves two goals of preparing the self for the possibility of failure (self-protective) and a motivational goal of increasing efforts to enhance the likelihood of things going well (Showers & Ruben, 1990). Sanna, et al (2006) suggest that *defensive pessimism*, *pessimism*, and *optimism* might represent a comparison of how people use prospective (T-2, T-1) versus retrospective (T+1) mental simulations. Defensive pessimists, as previously suggested, use upward prefactual simulations prospectively; optimists use downward counterfactual simulations retrospectively to engage a positive reconstrual of performance (mood-repair) after the fact (Sanna, 1996).

Self-esteem, in relation to people's feelings of self-worth, is also believed to relate to both prospective and retrospective simulations (Sanna, 2000). Individuals with low self-esteem are believed to be governed by upward self-protection motives; people with high self-esteem are thought to be governed by acquisitive motives (Sanna, et al, 2006). Sanna, et al (2006) discuss how although both make use of upward prefactuals (T-2 vs. T-1), individuals with low self-esteem most likely contrast them with the present in a self-protective manner. This is essentially a

similar approach to defensive pessimists. By contrast, individuals with high self-esteem assimilate upward counterfactuals. They are governed by acquisitive motives in a similar manner to optimists (Sanna, et al, 2006).

Essentially, it is possible that there are myriad personality differences where mental simulations comprise one distinguishing underlying process (Sanna, et al, 2006) worthy of further investigation. Examples of such differences might include broad traits that align with the experience of positive and negative affect, specific traits such as trait anxiety, and characteristics relating to the regulation of emotion (Sanna, 2000) and thereby attachment style. Indeed, regarding this latter characteristic, it is generally thought that individuals who favour thought suppression strategies do so to improve their mood (Beevers & Meyer, 2007). However, if such a "suppressor" is also experiencing current dysphoria, the strategy appears to become less effective. As a result, more thought intrusions and increased accessibility to negative thoughts could arise (Beevers & Meyer, 2007). It would therefore seem that thought suppression during emotional experiences can come with significant costs and may not represent an effective form of mood regulation (Beevers & Meyer, 2007).

2.4.5 *Outcome*

Sanna, et al (2006) suggest that prospective and retrospective mental simulations are triggered by positive or negative outcomes in the present (T0). Bad and good moods have been shown to produce upward and downward counterfactuals, respectively, because feelings are believed to serve as information about people's present states (Sanna, Meier, & Turley-Ames, 1998). Understandably, we tend to find that people view their lives more negatively in bad moods (e.g. "I am useless" or "I have failed") and more positively in good moods (e.g. "I am a good person" or "I am a success") (Sanna, et al, 2006). For example, Shepperd, Grace, Cole, and Klein (2005), suggest an assumption that a downward shift in predictions could reflect a response to mounting anxiety. The mood as information concept proposes that people might interpret their rising anxiety as anticipation for undesirable feedback (Shepperd, et al, 2005). This, in turn, prompts thoughts of possible failure or disappointment, and anxiety over disappointment prompts less optimistic and more upward mental simulations (Shepperd, et al, 2005). A further

example might be taken from Clark, Beck, and Alford's (1999) cognitive model of depression, which suggests that critical incidents might activate previously dormant negative self-referential schema. Essentially, the selective processing of negative material arises from activated schemas involving loss, deprivation, and failure (Clark, et al, 1999).

Sanna, et al (2006) discuss how mental contrasting and assimilation provide the mechanisms for how life events and moods influence simulations. Oettingen, Pak, and Schnetter (2001) discuss in their *fantasy realization theory* that when people contrast their fantasies about a desired future with present reality, a necessity to act is induced. Oettingen, et al's (2001) study found that people who mentally contrasted fantasies about a desired future with negative aspects of reality typically set themselves binding goals if they perceived their chances for success as high. Conversely, if their expectations of success were low, they avoided setting goals (Oettingen, et al, 2001).

Sanna, et al (2006) further propose that this thinking about expectations might underpin all goal-based simulations. Mood, they suggest, informs the present in a congruent manner (positive in good mood and negative in bad mood), and mental contrasting produces the goal-based simulations. Reactive simulations do not involve contrasts (Sanna, et al, 2006). For instance, Oettingen, et al (2001) found that people could indulge in *free fantasy* irrespective of the likelihood that these events or behaviours will actually occur. Sanna, et al (2006) suggest that such reactive mental simulations, which only focus on the future or past, form the basis of mental assimilation. Thus it is proposed that mental simulations will harmonise directionally with moods (Sanna, et al, 2006).

2.4.6 *Mental Simulation*

The combination of the above five factors discussed in the TEMPO model is proposed to lead to a variety of prospective and retrospective mental simulations, which can be seen in Figure 3. Sanna, et al (2006) explain that these can either be goal-based or reactive, acquisitive or aversive.

Sanna, et al (2006) break mental simulations down into prospective and retrospective categories. These can be seen in Figure 3. Within these two categories, Sanna, et al (2006) further define a series of subordinate categories relating to the reactive vs. goal-based and acquisitive vs. aversive motivations. These are explained as follows:

2.4.6.1 Prospective Mental Simulations (What may be)

Self-Improvement. Whether automatic or explicit, it is believed that expectancy based cognitive processing comprises general attempts to make sense of the environment (Roese & Olson, 1995a). It enables us to form causal theories to explain specific outcomes and to generate expectancies for future outcomes. Thus, expectancies essentially form attempts to gain mastery over one's surroundings (Weiner, 1986). Fantasy realisation theory suggests that there is an expectancy based route to goal setting that involves mentally contrasting fantasies about a desired future with a present reality (Oettingen, et al, 2001). This mental contrasting transforms the desired future into something that is to be achieved, or mastered, and reality into something that can be changed (Oettingen, et al, 2001). Sanna, et al (2006) propose that such mental contrasting forms the basis for self-improvement. They propose that this subcategory is, therefore, goal-based, prospective (i.e. focusing on the achievement of a desired future), and acquisitive (i.e. targeted at retaining something that is good or positive). In the case of self-improvement, Sanna, et al (2006) discuss how negative feelings offer an incentive to get better. Certainly, preparation for the future is seen as best served by upward simulations that focus on better alternatives than what actually happened (Sanna, 1996).

Self-Protection. Shepperd, et al (2000) explain that people generally find unexpected bad news aversive and they may consequently 'brace for loss' by predicting the worst. It seems that mentally simulating how the worst might transpire can moderate the pain of failure, should it occur (Sanna, Small, & Cook, 2004). Sanna, et al (2006) discuss how 'defensive pessimism' involves a form of self-protection. Sanna (1996) explains that defensive pessimists are people who benefit from adopting a negative outlook on future performances. The self-protective goal it serves is to prepare for the prospect of failure (Sanna, 1996), thus

lowering confidence in success. Sanna and Meier (2000) found evidence that differing construing of upward simulations could underlie changes in temporal confidence. A mental contrasting of upward simulations was shown to influence performance as if the individual experienced low self-esteem. Sanna, et al (2006) propose that self-protection is prospective, goal-based (i.e. involving a mental contrast with the present), and aversive (i.e. focused on avoidance of the negative future predictions).

Indulging. Oettingen, et al (2001) propose that people can fantasise about a positive future that simply enables them to enjoy it in the here and now. Since there are no reflections on present reality, a necessity to act is not induced. Sanna, et al (2006) describe this simulation as *indulging*. As previously discussed, McMullen (1997) explained how people can assimilate upward simulations. Expectations of success are not activated and used (Oettingen, et al, 2001). Sanna, et al (2006) propose that this simulation is prospective, acquisitive, and reactive (i.e. there is no clear premeditation or purpose). If we were to follow through the reasoning of the positivity effect, and the awareness of limited time in old age, it might be natural for *indulging* to occur. As Carstensen, et al (1999) have suggested, advancing age can focus the mind on the present with few expectations of future success. Therefore the ability to enjoy a positive future in the here and now might be highly appealing. However, such simulations also involve the generation of upward prefactuals, as indicated in Figure 3, which in the absence of feeling able to pursue one's goals also brings a high risk of regret.

Catastrophizing. Sanna, et al (2006) explain that catastrophizing involves simulating negative 'what if' scenarios and worrying about the bad things that may happen as a result. The *looming maladaptive style* (LMS) is discussed by Alloy and Riskind (2006) as functioning as a danger schema that intensifies danger and raises risk, as often seen operating in anxiety. Alloy and Riskind (2006) explain that the LMS is likely to present vulnerability to generalised anxiety disorder (GAD) by impairing mental control mechanisms required to deal with upsetting thoughts, thus increasing hypervigilance to threat and leading individuals to engage with catastrophic mental simulations. Sanna, et al (2006) describe catastrophizing as a prospective, aversive, and reactive mental simulation.

2.4.6.2   Retrospective Mental Simulations (What might have been)

Mood maintenance.   People who have experienced success or who are feeling happy generally work on preserving these positive feelings. The motive underlying this is believed to involve *mood maintenance* (Isen, 1987). In order to achieve this, Sanna, Meier, and Wegner (2001) found that people in good moods typically produced large numbers of downward counterfactuals and expressed great enjoyment at doing this. Similarly, Goerke, Möller, Schulz-Hardt, Napiersky, and Frey (2004) suggested that downward counterfactuals might serve an affect-regulating purpose for managers within organisations. Sanna, et al (2006) propose that mood maintenance is retrospective (i.e. focusing on 'what might have been'), goal-based, and involves contrasting a pleasant current reality with worse alternatives to emphasise the positive affect.

Mood Repair.   Singer and Salovey (1996) found evidence that people employ conscious strategies to repair negative mood states. Therefore, people in bad moods or individuals who have experienced failure or disappointment will typically work towards reinstating positive feelings. Sanna, Turley-Ames, and Meier (1999) found that individuals with high self-esteem thought more about downward counterfactuals, and felt better for it, when experiencing bad moods. Sanna, et al (2006) propose that mood repair is retrospective, goal-based, and that it involves contrasting negative realities with worse alternatives that can serve to regain positive feelings.

Reminiscing.   People typically reminisce by thinking back over old times or past experiences that were generally seen in a positive light. Individuals can continue to experience pride from their past achievements in a way that makes them feel closer to their former selves and enhances self-regard (Ross & Wilson, 2002). Sanna, et al (2006) propose that reminiscing is retrospective, reactive, and involves a mental assimilation of upward positive thoughts that are focused solely on the past.

Rumination.   Rumination typically involves a persistent and recurrent contemplation of the past with focus more on the negatives. It is believed to reflect a reactive and emotionally driven processing of events (Sharoff, 2004). Sanna, et

al (2006) propose that ruminations intensify reactions to negative life events. Nolen-Hoeksema (2000) found evidence that rumination was a predictor for both anxiety and depressive disorders. Sanna, et al (2006) suggest that ruminations are retrospective, aversive, and do not involve a contrast with a present state. Instead they involve mental assimilation of the negative feelings they instate (Sanna, et al, 2006).

2.5   The current study

Sanna (2000) has identified that there is a need for further research to identify some of the individual differences that might link motives with mental simulations. Sanna, et al (2006) have further suggested that mental simulations could help to uncover countless personality differences in the process of counterfactual thinking. It is surely possible that such intrinsic features of counterfactual and prefactuals thoughts, given their evident relationship with regret and mental wellbeing, represent vital knowledge for the recognition, support, and treatment of individuals who experience high levels of regret. Furthermore, there is an evident need for further research into the experience of contemplating and, ultimately, making a transition away from independent living and into a more supported form of residential care. This is particularly relevant given the work of Jongenelis, et al (2004), which highlighted high levels of depression in residents of nursing home environments. Further findings in support of this have come from Haight, et al (1998), Scocco, et al (2006), and Carstensen, et al (1999), all of which demonstrate that there are significant risks of psychopathology within this vulnerable and frequently overlooked population.

This thesis aims to explore the application of the TEMPO model (Sanna, et al, 2006) and assess whether there are certain predictors of the propensity to develop regret counterfactuals, e.g. personality type, mood. It also aims to establish whether an increased number of counterfactuals, and also perhaps a specific type, might emerge as people move along the TEMPO timeline towards older age. In order to quantify such prefactual or counterfactual simulations, this thesis will aim to conduct an exploratory thematic analysis. It is hoped that such an approach of identifying key themes will primarily aid clarification of whether statements appear

to be upward or downward. However, it is also anticipated that this approach might offer us some insight into the primary thoughts and concerns of individuals contemplating a future move away from independent living.

Due to the enormity of such a project, this thesis aims to focus on a somewhat simplified version of the TEMPO model. It will not directly test the environment and motivation aspects of the model but will instead concentrate on applying the model to look at the influence of time, personality, and outcome on the generation of mental simulations. The purpose behind this was to apply the TEMPO model to assess whether any clear predictors surrounding personality and mood, for example, exist in individuals who may be more likely to experience regret, and possible low mood, in the transition from independent living. Although there are understandably many aspects of personality, for example, that could be investigated in the roles they might play, this thesis has concentrated solely on those features identified by Sanna, et al (2006) in their publication of the TEMPO model. A revised model demonstrating the components under investigation is presented in Figure 4.

Figure 4: Aspects of the TEMPO model (Sanna, et al, 2006) under investigation

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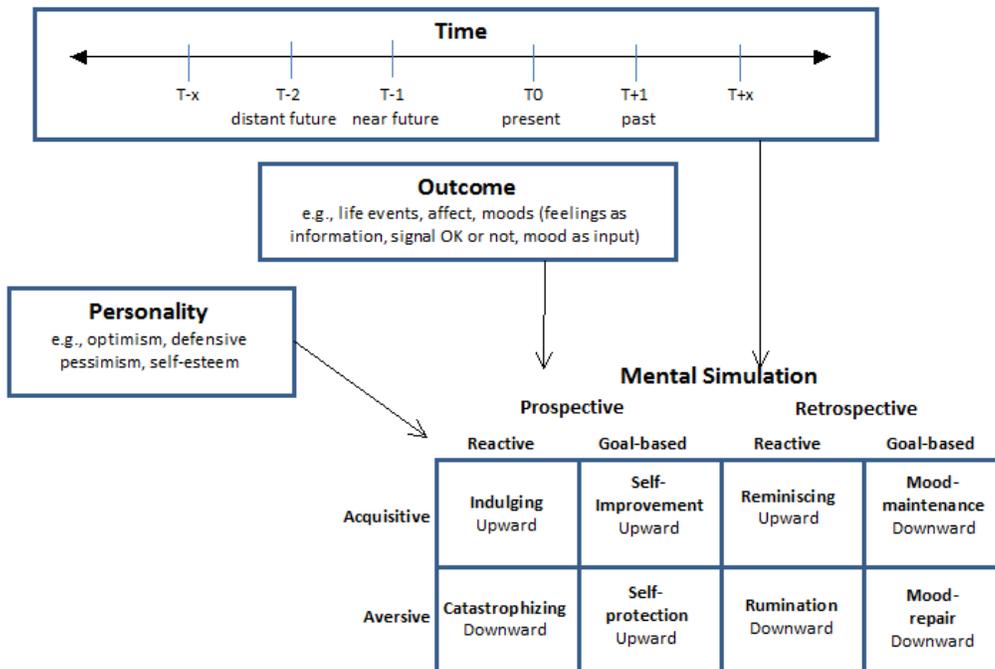
2.6   Hypotheses

1. Given the findings of Gilovich, et al (1993) and Shepperd, et al (2000) that suggest there is perhaps a tendency to brace for the worst and generate more threatening mental simulations as an individual moves closer in time towards a specific event, it is first hypothesised that individuals moving closer towards the prefactual scenario (T-1; see Figure 4) will be more likely to express increased counterfactual and prefactual statements regarding a move to residential living.

2. a)   Based on the proposals of Sanna, et al (2006) surrounding the possible links between low self-esteem and upward self-protection motives, it is hypothesised that individuals scoring low on measures of self-esteem (here, the Rosenberg Self-Esteem Scale) will express more upward prefactuals regarding a move to residential living.

   b)   Sanna, et al (2006) propose that the downward simulation 'catastrophizing' involves thoughts that intensify risk and danger, as often seen in anxiety. It is therefore hypothesised that individuals scoring high on measures of trait anxiety (here, the Spielberger Trait Anxiety Scale) will express more downward prefactuals regarding a move to residential living.

   c)   As previously suggested, defensive pessimists are proposed to use upward prefactual simulations prospectively (Sanna, 1996). Therefore, it is hypothesised that individuals scoring high on measures of pessimism (here, the Life Orientation Test – Revised) will express more upward prefactuals regarding a move to residential living.

3. Similar to the proposal that anxiety may involve catastrophic predictions about future scenarios, depression has often been linked with rumination over certain events with a focus on the negative (Sanna, et al, 2003). Given such examples of 'aversive' simulations, it is proposed that individuals experiencing low mood (poor mental health; here, a score of 3 or more on the General Health Questionnaire – 12) will be more likely to generate more negative evaluations and experience more aversive simulations.

4. Beevers and Meyer (2007) indicated that if an individual who favoured thought suppression strategies were also experiencing dysphoria (e.g. the negative mood states discussed in Hypothesis 3), more thought intrusions and increased accessibility to negative thoughts could arise. It is therefore hypothesised that individuals scoring high on measures of thought control (here, The White Bear Suppression Inventory), and who are also experiencing dysphoric mood (here, a score of 3 or more on the General Health Questionnaire – 12), will experience more aversive mental simulations regarding a move to residential living.

3.   METHOD

3.1   Design

A naturalistic experimental design employing a cross-sectional analysis of two groups was used. The main grouping variable comprised each participant's life stage, i.e. whether they were community dwelling working-age adults or older adults. Additional independent variables, as determined by the proposals of the TEMPO model (Sanna et al, 2006), included an individual's personality and their current mental health. Participants were also asked whether they, too, were considering a move of any kind. This might also be considered in terms of the TEMPO model as determining proximity to a housing move situation. The element of choice in undertaking any such move was also considered in terms of whether participants making such a decision considered it to be their own choice or a choice that was forced in some way. The dependent variable of this study involved the number and type of mental simulations generated in accordance with the TEMPO model.

3.2   Participants

Participants were selected by opportunity sample into two distinct groups.

The first group selected working-age adults (aged 18 to 64), with the inclusion criteria set at them being from a working-age adult population and not being recruited from NHS contacts.

The second group selected community dwelling older adults (aged 65 and over), in privately owned, rented, or supported accommodation, with the inclusion criterion set at them not being recruited through NHS contacts.

The recruitment of the two specific groups was in accordance with the *'Time'* component of Sanna, et al's (2006) TEMPO model. In this case, the differing life stages, seen in the above two groups, were considered to offer a progression from

T-2 to T-1 (Figure 4) as participants indicated their potential proximity to the prefactual scenario of a move to supported housing.

3.3   Measures overview

An important consideration for selecting the measures used in this study was that they would offer an adequate examination of the TEMPO model and the various associated hypotheses within this study.   A second consideration involved the amount of time taken to complete each measure.   All the questionnaires selected were relatively brief, i.e. they each took between 2 and 10 minutes to complete.   Permission to use questionnaires was obtained either from the test authors or the tests were found in the public domain.   Large print versions of the questionnaires were also generated where necessary.   In the case of the STAI and the GHQ12, copies of the tests were purchased from the publisher for use in this research.   It was estimated that the structured written interview (prefactual scenario), and additional background information sheet, would take between 20 to 30 minutes to complete.   The whole process of completing questionnaires and the structured written interview was estimated to take between 30 minutes and 1 hour.

3.3.1 _Prefactual Scenario_

The structured written interview, constituting the prefactual scenario, was designed specifically for this study in order to answer the main hypotheses (see Appendix 4). Essentially, the layout of the prefactual scenario followed Gilovich and Medvec's (1994) scenario design.   The interview asked participants to read a short story, about two hypothetical individuals ("Joan" and "William") each considering their future housing needs.   Participants were then asked to write down who would feel better about their situation and why.   They were also asked to write down what could be better or worse about each character's situation.   The aim of such questioning was to elicit both upward (what could be better) and downward (what could be worse) prefactual/counterfactual statements.

In   terms   of   coding   verbal   statements   into   upward   or   downward prefactual/counterfactual statements, Sanna, et al's (2006) categorisation of the various mental simulations (e.g. catastrophizing, mood repair, self-protection; see

section 2.4.6) was employed. To give an example of this process, a statement reading "if (William) could no longer cope living alone with his illness and hurt himself, there would be no-one there to look after him" might be taken as an example of "catastrophizing." The reasoning behind this is that it was seen to simulate a negative 'what if' scenario with concern for the bad things that might happen as a result (Sanna, et al, 2006). A different example might be "if (Joan) remained in her own home, in her old area, and had not opted for a transitional move, she would have a chance of knowing familiar faces in her nursing home." In this case, the statement might be taken as an example of "self-protection" in that it was effectively an example of a 'brace for loss' (the assumption that Joan may now end up isolated and alone) by contrasting upward simulations, of how things could be better (remaining in a familiar area), with one's present situation (Sanna and Meier, 2000). In coding statements within this framework, it was also possible to determine the number of acquisitive and aversive simulations generated. Indeed, such information formed an essential part of hypotheses testing. In the case of the two examples above (catastrophizing and self-protection), the TEMPO model (see Figure 4) identifies them as both "aversive."

3.3.2 *Demographic Data*

Basic demographic data was obtained for each participant in order to describe the sample. The background information obtained was largely designed to establish each participant's potential proximity to making such housing decisions, i.e. whether they themselves were contemplating such imminent housing moves.

The following demographic data was collected (see Appendix 5):
• Gender;
• Age;
• Current living arrangements (who with and type of housing);
• Any plans for a housing move of any kind over the next year;
• Type of housing arrangements undertaken in this move;
• How the decision to move was made;
• What could be better about the participant's situation regarding a move;
• What could be worse about the participant's situation regarding a move.

In terms of the last two bullet points (above), these questions were designed to elicit prefactual statements from any individuals regarding their own living arrangements, and whether they were considering a move in the near future.

3.3.3 *Personality Measures*

In accordance with the TEMPO model, several measures were selected to assess aspects of the *'Personality'* component under investigation (Figure 4).

3.3.3.1 *Wells' Thought Control Questionnaire* (Wells & Davies, 1994).

Well's Thought Control Questionnaire (TCQ) (see Appendix 6) consists of 30 statements that describe various thought control strategies. Essentially there are 6 statements in each of 5 subscales designed to assess peoples' tendency to use a variety of thought control strategies in everyday life. For example, self-punishment ('I slap or pinch myself to stop the thought'); reappraisal ('I try to reinterpret the thought'); distraction ('I occupy myself with work instead'); worrying ('I worry about minor things instead'); and social methods of control ('I talk to a friend about the thought'). A total TCQ score can be computed by summing the scores on the individual subscales, and can range from 30 to 120. Higher scores indicate a greater variety of mental control strategies being used. Wells and Matthews (1996) reported good reliability for the TCQ, and the TCQ was also found to correlate meaningfully with a measure of one's tendency to use thought suppression: The White Bear Suppression Inventory.

3.3.3.2 *The White Bear Suppression Inventory* (Wegner & Zanakos, 1994).

The White Bear Suppression Inventory (WBSI) (see Appendix 7) is a 15-item questionnaire measuring the propensity to use thought suppression in everyday life. It contains statements like, 'I always try to put problems out of mind' or 'I have thoughts I cannot stop'. Ratings are made on a five-point scale ranging from 'strongly disagree' to 'strongly agree'. Scores can range from 15 to 75 with higher scores indicating a greater tendency to suppress one's thoughts in everyday life. Wegner and Zanakos (1994) reported good reliability over time for the WBSI when

tested on a sample of 162 undergraduate students. They also indicated good convergent validity against self-reports of obsessive thinking, anxiety, and depression (Wegner & Zanakos, 1994). Translations of the WBSI have demonstrated further support for the reliability and validity of the test (e.g. Yücel Ağargün, Beşiroğlu, Kemal Kiran, Kara, & Akil Ozer, 2004).

3.3.3.3 *Spielberger State-Trait Anxiety Inventory* (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983).

The Spielberger State-Trait Anxiety Inventory (STAI) comprises separate self-report scales for measuring state and trait anxiety. The state anxiety (S-Anxiety) scale consists of 20 statements that evaluate how people feel *right now*. The trait anxiety (T-Anxiety) scale (see Appendix 8) is a 20-item measure that assesses how people *generally* feel (Spielberger, et al., 1983). The T-Anxiety scale, which has been used in this study, has been widely used in assessing clinical anxiety, as a useful screening tool, and in experimental research (Spielberger, et al., 1983). Items include 'I feel pleasant' and 'I am tense'. Ratings are made on a 4-point scale from 'not at all' to 'very much so'. Scores on this 20-item scale can range from 20 to 80, with higher scores indicating greater anxiety. Good reliability is reported for the T-Anxiety scale and correlations of the T-Anxiety scale were high against other anxiety measures (Spielberger, et al., 1983). Cross-cultural support for the reliability and validity of the English version of the STAI has also been established (e.g. Quek, Low, Razack, Loh, & Chua, 2004).

3.3.3.4 *Life Orientation Test – Revised* (Scheier, Carver, & Bridges, 1994).

The Life Orientation Test – Revised (LOT-R) (see Appendix 9) is a 10-item (four of which are fillers) measure that has been developed to assess individual differences in generalised optimism vs. pessimism. The LOT-R has been used extensively in research examining life events. Its brevity makes it suitable for projects where many measures are being utilised. Participant responses are recorded using a 5-point Likert scale (0=strongly disagree to 4=strongly agree). Higher scores indicate higher

levels of optimism. The LOT-R has demonstrated good reliability over time. There is also support for good predictive and discriminant validity from the measure being tested on a sample of 4,309 undergraduate students (Scheier, et al, 1994).

3.3.3.5   *Marlowe Crowne Social Desirability Scale* (Crowne & Marlowe, 1960).
Social desirability is generally thought of as the desire to project oneself in a positive light when engaged in social interactions (Johnson & Fendrich, 2002). The Marlowe Crowne Social Desirability Scale (MC) (see Appendix 10) is a 33-item measure of the tendency to respond in a socially desirable manner. Higher scores represent a greater need to present the self in a favourable light. The MC uses a true/false response format. Typical items include, 'I'm always willing to admit it when I make a mistake', or 'I have never intensely disliked someone'. Crowne and Marlowe (1960) reported good internal consistency and good validity for the scale when tested on a group of 39 undergraduate students. However, there have been few recent studies to corroborate its validity (Johnson & Fendrich, 2002). When used in conjunction with the STAI, the MC Scale may be used to assess a repressive coping style (Weinberger, Schwartz, & Davidson, 1979).

3.3.3.6   *Rosenberg Self-Esteem Scale* (Rosenberg, 1965)
The Rosenberg Self-Esteem Scale (SES) (see Appendix 11) is a 10-item self-report measure of global self-esteem. Originally designed to assess self-esteem in adolescents, it is now widely used in both adolescent and adult populations and is suitable for both clinical and general populations. The SES consists of 10 statements relating to feelings of self-worth or self-acceptance. It is scored using a 4-point Likert scale; with responses ranging from strongly agree to strongly disagree. Higher scores indicate higher self-esteem. The scale demonstrates good reliability and validity across numerous studies (e.g. Shahani, Dipboye, & Phillips, 1990).

3.3.4 Outcome Measures

In accordance with the TEMPO model, the General Health Questionnaire (GHQ12 – Goldberg & Williams, 1988) (see Appendix 12) was used to measure the *'Outcome'* component of the model under investigation (Figure 4). The GHQ12 is a 12-item measure that asks informants about their general level of happiness, experience of depressive and anxiety symptoms, and sleep disturbance over the last four weeks. Interpretation of the answers is based on a four-point response scale scored using a bimodal method (symptom present: 'not at all' = 0, 'same as usual' = 0, 'more than usual' = 1 and 'much more than usual' = 1). Numerous studies have confirmed the reliability and validity of the test (e.g. Goldberg, Gater, Sartorius, Ustun, Piccinelli, Gureje, & Rutter, 1997). Translations of the GHQ12 have also demonstrated support for its reliability and validity (e.g. Montazeri, Harirchi, Shariati, Garmaroudi, Ebadi, & Fateh, 2003).

3.4 Analysis of Data

3.4.1 Quantitative Data

Quantitative data was obtained through use of the seven questionnaires, outlined above, and through the demographic data feedback and prefactual scenario. Quantitative data was coded, where relevant, and entered into the Statistical Package for the Social Sciences (SPSS) programme for analysis.

In considering the first hypothesis, the aim was to compare the mean number of prefactual and counterfactual statements generated between the two groups, i.e. two points along the TEMPO timeline. For the remaining hypotheses, again these involved making comparisons between two groups, e.g. low self-esteem v high self-esteem. This was in order to identify whether there were differences between each of the groups in the number of prefactual statements generated. In terms of statistical testing, the data was first scrutinized to determine whether skewness and homogeneity requirements were met and that no extreme values were present. Subsequently, it could be determined whether parametric tests, such as the Independent-Samples T Test, were appropriate to determine whether any differences between the groups were statistically significant.

3.4.2 *Qualitative Data*

Qualitative written feedback was obtained at two stages of data collection. The first came in the written responses to the prefactual scenario about which of the two characters would feel better or worse. Further feedback came from written responses of what could be better or worse about each character's situation. The second feedback opportunity occurred in the background information section, where participants could indicate whether they too were considering moves and what could make their own situations better or worse.

Qualitative data, such as that indicated above, was analysed through thematic analysis of the participant statements. This approach essentially followed Braun and Clarke's (2006) recommendations for conducting a thematic analysis. Braun and Clarke (2006) define thematic analysis as a method for identifying, analysing, and reporting patterns, or themes, in data. A theme is proposed as capturing something important about the data in relation to the research question. It also represents some level of pattern or meaning in the data set (Braun & Clarke, 2006). Braun and Clarke (2006) argue that it is down to researcher judgement to determine what a theme is. With this in mind, data was analysed both for general themes and for whether the statements appeared to fit into an upward or a downward counterfactual framework. This was essentially to aid later quantification of these statements. An inductive, bottom up, approach was the main approach to clarify themes raised in this study, in order to provide a rich and close description of the data overall. This approach essentially involved an initial coding of the sentiment of the data without trying to fit it into a pre-existing coding frame (Braun & Clarke, 2006).

The data was finally subjected to investigator triangulation (Denzin, 1970), whereby one of the project supervisors also analysed written material. Waltz, Strickland, and Lenz (2005) argue that such an approach lends credibility to the data set since it allows for comparison between investigators. It can also aid detection of potential bias in coding, reporting, or analysis (Waltz, et al, 2005).

3.5   Procedure

Once research and ethical approval had been obtained, this study was registered online with the University of Hertfordshire's experimental management system ("Sona System") for recruiting UH students to the study as part of the working-age adult group. Recruitment through this system was conducted in return for course credit. However, in order to enhance recruitment into this group, participants were also sought from a working-age population in the wider community. Recruitment for the older adult sample (Group 2) involved opportunity sampling from various community organisations (e.g. local yacht club), Church groups, sheltered housing schemes, coffee mornings, Age Concern, and the friends and relatives of associates. Further organisations such as the Alzheimer's Society were also approached and the researcher was invited to attend drop-in meetings to promote this research and to recruit potential participants from their members.

Individuals were made aware of the research through a brief conversational description and rationale for the study, which was given by the researcher. They then identified whether they were (or whether they knew of) any suitable candidates based on the inclusion criteria (see Section 3.2). Where interest was registered, the participant information sheet (see Appendix 1), checklist of forms (see Appendix 2), and consent form (see Appendix 3) were handed out along with the structured written interview (prefactual scenario) (see Appendix 4), background information sheet (see Appendix 5), questionnaires (see Appendices 6-12), and debriefing sheet (see Appendix 13). Participants were advised that they should complete the pack in their own time. They were informed that the researcher could assist them directly; return at a later time to collect completed forms; or participants could choose to post completed forms back to the researcher in the pre-paid envelope provided. The checklist of forms offered further guidance on which forms should be retained and which returned.

In the case of UH students signed up through the Sona System, the researcher arranged timeslots and room bookings to meet with participants and hand out forms. Students then completed the forms independently while the researcher

remained present in the room to offer any assistance. Upon successful completion of the study, the researcher then confirmed course credit for students.

3.6   Feedback Arrangements

All participants were offered the opportunity to receive feedback on the findings of this study, once the data was available. A debriefing sheet was attached to the questionnaires, which left space for participants to write down their email or postal address should they wish to know these results. Feedback to participants was not essential, though many did wish to be informed of the findings of this thesis. It was considered that offering such details could provide an additional benefit for participants, particularly those who might find themselves at the beginning of contemplating such moves in the future. This information was thought to offer participants some insight into the considerations of making such a move, which might enrich their experience of taking part in the study.

3.7   Power Calculation

Using Cohen's conventions for effect sizes (Cohen, 1992), a sample size of 33 in each group would be required to detect a mean difference amounting to medium to large effect size (d = 0.7; power = 0.80; alpha error = 5%; 1 tailed). Thus, a total sample size of 66 would be required.

3.8   Ethical Considerations

Approval for this study to proceed was applied for from the University of Hertfordshire's School of Psychology Ethics Committee in May 2008. Permission to proceed with the study was given in June 2008 (see Appendix 14).

3.8.1 Confidentiality

Participant confidentiality was assured at all times, both verbally and through the information sheet. The information sheet and consent form stated that participants did not have to take part in this research. It also informed them that if they chose

to take part, they could subsequently withdraw at any time. Only the researcher had access to participants' identifying information through the study.

3.8.2 *Procedure for Managing Participants' Distress*

The nature of this research study meant that it was unlikely to cause participants undue distress. Indeed, of the 66 participants who ultimately completed this study, none reported significant distress in the procedure. However, the information sheet informed participants of the contact details for the researcher, should distress arise. Furthermore, the debriefing sheet reiterated these contact details and also offered contact details for the Samaritans should participants wish to access additional support at a later time.

3.8.3 *Time Considerations*

The total time to complete the questionnaire pack and structured written interview was roughly between 30 minutes and one hour. A small number of participants in the study reported difficulty in concentrating on the pack of questionnaires for any extended period of time. Some also reported believing that it might be a daunting amount of work to undertake. Therefore regular breaks, and the opportunity to take the question pack and written interview away to complete at their leisure, were encouraged with each participant.

4   RESULTS

The results section of this thesis is split into three sections and will begin with details of the recruitment process involved and a summary description of the sample. Following this, the main findings are discussed with reference to the hypotheses and research questions.   Finally, some general themes that emerged from the qualitative data are presented.

4.1   Demographic Information

The recruitment process, including details of attrition rates, is summarised in Figure 5.   There were 66 participants who took part in this study; details of demographic information are summarised in Table 1 (see over page).

Figure 5: Recruitment and attrition of study participants
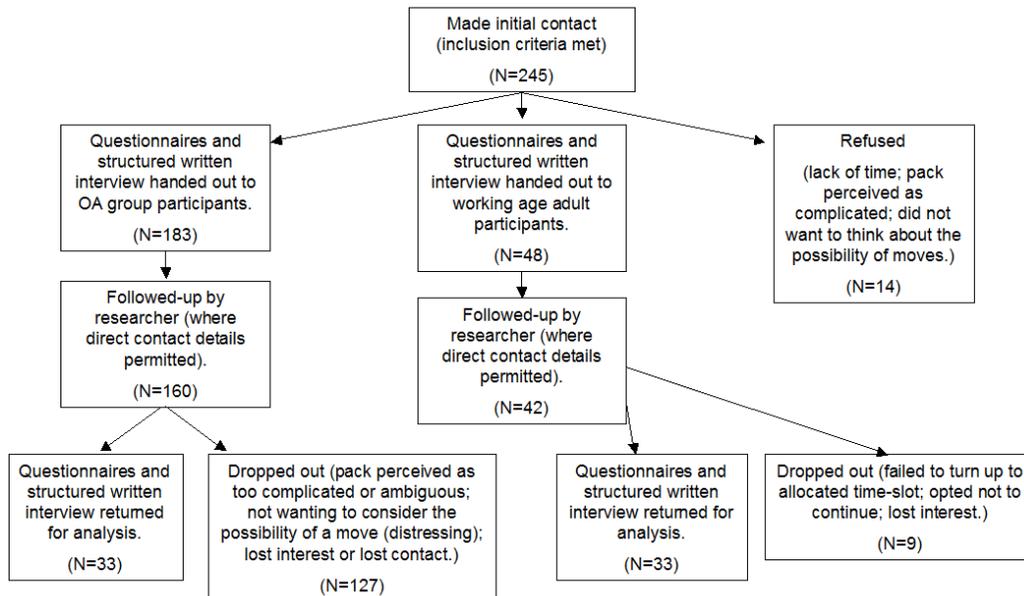
In total, 33 individuals from a working-age population (age 18-64; Group 1) took part along with 33 individuals from an older adult population (aged over 65; Group 2).   In terms of whether participants themselves anticipated making a move in the near future, 14 said they were considering a move (eight from Group 1, six from Group 2).   Of this number, one member from Group 2 said they were considering a move to a supported/sheltered housing scheme and

one member, again from Group 2, said they were planning a move to residential care. In both of these cases, participants stated that the move was influenced by health/mobility/bereavement.   Eleven members (seven from Group 1, four from Group 2) said they were thinking of making a private move of their own free choice, and one member from Group 1 was planning an unspecified move, again of their own free choice.

Table 1: Sample Characteristics

Variable	Sample Size (%) (N=66)	Group 1 (N=33) (Working-age adult age 18-64)	Group 2 (N=33) (Older adult aged over 65)
Gender			
Male	21 (31.8%)	8 (24.2%)	13 (39.4%)
Female	45 (68.2%)	25 (75.8%)	20 (60.6%)
Age			
Mean	50.86	27.58	74.15
Range	18-98	18-45	65-98
SD	24.791	8.489	7.600
Living Arrangements			
With spouse	30 (45.5%)	10 (30.3%)	20 (60.6%)
With son/daughter	3 (4.5%)	3 (9.0%)	0 (0%)
Live alone	19 (28.8%)	7 (21.2%)	12 (36.4%)
With friend(s)	3 (4.5%)	3 (9.0%)	0 (0%)
Other	11 (16.7%)	10 (30.3%)	1 (3.0%)
Current Home			
Own home	39 (59.1%)	11 (33.3%)	28 (84.8%)
Private rented	13 (19.7%)	12 (36.4%)	1 (3.0%)
Council	4 (6.1%)	3 (9.0%)	1 (3.0%)
Live with family	7 (10.6%)	7 (21.2%)	0 (0%)
Sheltered housing	1 (1.5%)	0 (0%)	1 (3.0%)
Other	2 (3.0%)	0 (0%)	2 (6.0%)
Considering a Future Move			
Yes	14 (21.2%)	8 (24.2%)	6 (18.1%)
No	52 (78.8%)	25 (75.8%)	27 (81.8%)

4.1.1 Dropouts

There were 136 people (nine from Group 1, one-hundred-and-twenty-seven from Group 2) who made initial contact, and who met the inclusion criteria, but who then dropped out of the study without completing any of the forms. The high numbers of dropouts in Group 2 were anticipated based upon the known difficulties of recruiting older people to research (e.g. Harris & Dyson, 2001). On this basis, a considerable amount of time was put aside for the data collection period, as recommended by Harris and Dyson (2001), and a large number of contacts were made with individuals from this group (see Figure 5).

In general, there were two main reasons identified for potential participants not wishing to proceed with this study. The first involved participants reading through the information sheet and reporting back that they felt it was too complicated or too lengthy. The second, and most frequently reported, reason for not wishing to continue was the individual experiencing similar situations, either themselves or with family members. In these cases, participants typically reported back that they felt it was "a little too close to home," as one potential Group 2 member remarked. In other cases, again almost exclusively relating to potential Group 2 members, individuals reported that they simply did not wish to think about such a time in their life where they might have to make this decision.

4.2   Tests of the TEMPO Model

The second section of the results reports findings from a series of one-tailed Independent-Samples T Tests, since parametric requirements were met by the data. The data set was scrutinised for significant differences in each of the four hypotheses previously stated. See Tables 2-11 for a summary of the findings from these group comparisons, with effect sizes for the group differences based on definitions provided by Cohen (1992).

4.2.1 *The use of triangulation*

In terms of reliability in coding the prefactual/counterfactual statements, a sample of 13 (20%) of the total data set of 66 completed questionnaires was independently scrutinised by one additional member of the research panel. Of

these 13, 7 questionnaires came from the older adult group and 6 from the working-age adult group. As Lietz, Langer, and Furman (2006) highlight, having additional researchers scrutinise the data improves the trustworthiness and rigour of the findings, as well as allowing for inconsistencies and differences in interpretation to surface. With regards to agreement with the findings of the Primary Researcher, of the 52 statements coded for the prefactual scenario, both researchers agreed on 70% for the direction of statements (upward or downward prefactuals/counterfactuals) plus the number of statements elicited. In terms of agreement for the direction of statements only, both researchers agreed on 83%. Such findings were similar to the agreement achieved through other studies (e.g. Farmer, Robinson, Elliott, & Eyles, 2006) in terms of what is considered an acceptable level of agreement to ensure confidence in the coding process. Furthermore, of the 8 individuals in this sample who completed personal statements of what could be better or worse, both researchers agreed on 64% for direction of statements plus number of statements elicited. The same agreement was found for the direction of statements elicited only. In consideration of the data not agreed on by both researchers, the research panel met to discuss discrepancies. This procedure both improved on the understanding of the data and allowed a consensus to be formed. This same procedure was followed with regards to confirming the trustworthiness of the themes that appeared to emerge from the prefactual/counterfactual statements elicited.

4.2.2 _Hypotheses testing_

Hypothesis 1 stated that individuals moving closer towards the prefactual scenario (T-1; Figure 4) will be more likely to express increased counterfactual and prefactual statements regarding a move to residential living. Testing revealed that a _significantly higher_ number of prefactual/counterfactual statements were indeed generated by the older adult group for the prefactual scenario of two older adults considering a move into supported housing (see Table 2). However, no significant differences were detected between the two groups for the overall number of prefactual/counterfactual statements generated by those 26 individuals from both groups who went on to describe personal scenarios of what could be better or worse for them personally (see

Table 3). Further analysis (see Table 2) revealed, specifically, a *significantly higher* number of *upward* prefactual/counterfactual statements generated by the older adult group for William's situation. Furthermore, the older adult group generated a *significantly higher* number of overall *upward* prefactual/counterfactual statements for the prefactual scenario.

Table 2: Age group comparisons on number of statements generated

	Work-age (N=33) Mean (SD)	Older adult (N=33) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Joan Up Prefactuals	1.09 (0.765)	1.45 (1.201)	-1.467	0.073	0.37
Joan Down Prefactuals	1.73 (1.126)	1.58 (0.867)	0.613	0.271	0.15
William Up Prefactuals	1.18 (0.882)	1.79 (0.781)	-2.955	0.002	0.74
William Down Prefactuals	1.48 (0.939)	1.61 (1.197)	-0.458	0.325	0.11
Total Character Up Prefactuals	2.27 (1.464)	3.24 (1.521)	-2.639	0.005	0.66
Total Character Down Prefactuals	3.21 (1.781)	3.18 (1.776)	-0.069	0.243	0.02
Total Character Prefactuals	5.48 (1.889)	6.42 (2.538)	-1.706	0.047	0.43

Table 3: Age group comparisons on number of personal statements generated

	Work-age (N=8) Mean (SD)	Older Adult (N=18) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Personal Up Prefactuals	1.50 (1.414)	1.50 (2.121)	0.000	0.500	0.00
Personal Down Prefactuals	2.50 (1.414)	1.89 (1.530)	0.961	0.173	0.39
Total Personal Prefactuals	4.00 (1.927)	3.39 (2.330)	0.648	0.262	0.26

N.B: Despite the relatively large group numbers through most of the analyses, for Tables 2-11, where any potential violation to homogeneity of variances was encountered, or where any extreme scores were encountered, non-parametric tests (Mann-Whitney U test; MWU) were run as a backup to the Independent-Samples T Tests. However, these did not lead to significantly different findings in the small number of comparisons affected.

Hypothesis 2 stated that:

a) Individuals scoring low on measures of self-esteem will express more upward prefactuals regarding a move to residential living. No significant differences were detected between the two groups (low self-esteem vs. high self-esteem, as defined by a median split in the SES scores) for either the prefactual scenario (see Table 4) or for personal statements (see Table 5). Similarly, there were no significant differences detected for the number of downward or overall statements.

Table 4: Self-esteem comparisons on number of statements generated

	Low SE (N=39) Mean (SD)	High SE (N=27) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Joan Up Prefactuals	1.33 (1.155)	1.19 (0.786)	0.579	0.282	0.14
Joan Down Prefactuals	1.64 (0.873)	1.67 (1.177)	-0.102	0.460	0.03
William Up Prefactuals	1.36 (0.778)	1.67 (1.000)	-1.405	0.083	0.35
William Down Prefactuals	1.67 (1.177)	1.37 (0.884)	1.108	0.136	0.28
Total Character Up Prefactuals	2.69 (1.704)	2.85 (1.350)	-0.406	0.343	0.10
Total Character Down Prefactuals	3.31 (1.734)	3.04 (1.829)	0.610	0.272	0.15
Total Character Prefactuals	6.00 (2.449)	5.89 (2.025)	0.194	0.424	0.05

Table 5: Self-esteem comparisons on number of personal statements generated

	Low SE (N=16) Mean (SD)	High SE (N=10) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Personal Up Prefactuals	1.44 (1.315)	1.60 (2.675)	-0.208	0.419	0.08
Personal Down Prefactuals	2.06 (1.569)	2.10 (1.449)	-0.061	0.476	0.02
Total Personal Prefactuals	3.50 (2.066)	3.70 (2.497)	-0.222	0.413	0.09

b) Individuals scoring high on measures of trait anxiety will express more downward prefactuals regarding a move to residential living. No significant differences were detected between the two groups (low anxiety vs. high anxiety, as defined by a median split in the STAI scores) for either the prefactual scenario (see Table 6) or for personal statements (see Table 7). Similarly, no significant differences were detected for the number of upward or overall statements generated.

Table 6: Anxiety comparisons on number of statements generated

	Low anxiety (N=39) Mean (SD)	High anxiety (N=27) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Joan Up Prefactuals	1.18 (0.854)	1.41 (1.217)	-0.895	0.187	0.22
Joan Down Prefactuals	1.64 (1.088)	1.67 (0.877)	-0.102	0.460	0.03
William Up Prefactuals	1.51 (0.885)	1.44 (0.892)	0.308	0.380	0.08
William Down Prefactuals	1.41 (0.850)	1.74 (1.318)	-1.239	0.110	0.31
Total Character Up Prefactuals	2.69 (1.341)	2.85 (1.854)	-0.406	0.343	0.10
Total Character Down Prefactuals	3.05 (1.685)	3.41 (1.886)	-0.804	0.212	0.20
Total Character Prefactuals	5.74 (1.802)	6.26 (2.823)	-0.906	0.184	0.23

Table 7: Anxiety comparisons on number of personal statements generated

	Low anxiety (N=20) Mean (SD)	High anxiety (N=6) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Personal Up Prefactuals	1.45 (2.012)	1.67 (1.633)	-0.240	0.406	0.10
Personal Down Prefactuals	2.20 (1.576)	1.67 (1.211)	0.760	0.228	0.31
Total Personal Prefactuals	3.65 (2.084)	3.33 (2.733)	0.304	0.382	0.12

c) Individuals scoring high on measures of pessimism will express more upward prefactuals regarding a move to residential living. No significant differences were detected between the two groups (low pessimism vs. high pessimism, as defined by a median split in LOT-R scores) for either the prefactual scenario (see Table 8) or for personal statements (see Table 9). Similarly, no significant differences were detected for the number of upward or overall statements.

Table 8: Pessimism comparisons on number of statements generated

	Low Pess. (N=30) Mean (SD)	High Pess. (N=36) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Joan Up Prefactuals	1.23 (0.898)	1.31 (1.117)	0.286	0.388	0.07
Joan Down Prefactuals	1.83 (1.117)	1.50 (0.878)	- 1.357	0.090	0.34
William Up Prefactuals	1.47 (0.860)	1.50 (0.910)	0.152	0.440	0.04
William Down Prefactuals	1.53 (1.008)	1.56 (1.132)	0.083	0.467	0.02
Total Character Up Prefactuals	2.70 (1.557)	2.81 (1.582)	0.272	0.394	0.07
Total Character Down Prefactuals	3.37 (1.866)	3.06 (1.689)	- 0.710	0.240	0.18
Total Character Prefactuals	6.07 (1.760)	5.86 (2.642)	- 0.364	0.359	0.09

Table 9: Pessimism comparisons on number of personal statements generated

	Low Pess. (N=14) Mean (SD)	High Pess. (N=10) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Personal Up Prefactuals	2.00 (2.708)	1.19 (1.167)	- 1.062	0.150	0.43
Personal Down Prefactuals	2.40 (1.647)	1.88 (1.408)	- 0.867	0.198	0.35
Total Personal Prefactuals	4.40 (2.591)	3.06 (1.806)	- 1.554	0.067	0.63

Hypothesis 3 stated that individuals experiencing low mood ('poor' mental health) will be more likely to generate more negative evaluations and experience more aversive simulations. From the data gathered, it was possible to subjectively classify statements into acquisitive (e.g. indulging, self-improvement, mood-maintenance) or aversive (e.g. catastrophizing, self-protection, mood-repair) simulations. Testing revealed that there were no significant differences detected between individuals indicating 'poor' mental health (score 3 or more on the GHQ-12) and individuals indicating 'good' mental health (score under 3 on the GHQ-12) for the number of aversive statements generated in the prefactual scenario (see Table 10).

Table 10: Mental health comparisons on number of acquisitive/aversive statements

	'Poor' MH (N=22) Mean (SD)	'Good' MH (N=44) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Acquisitive Statements	2.41 (1.182)	2.41 (1.386)	0.000	0.500	0.00
Aversive Statements	3.18 (1.368)	3.66 (2.101)	0.966	0.239	0.24

Hypothesis 4 stated that individuals scoring high on measures of thought control, and who are also experiencing dysphoric mood, will experience more aversive mental simulations regarding a move to residential living. Again, based on the classification of statements and mental health discussed in hypothesis 3, testing revealed no significant differences between those individuals indicating high thought control (as defined by a median split in WBSI scores) plus dysphoric mood (Group 1) and those individuals not scoring high for thought control plus dysphoric mood (Group 2) for the number of aversive statements generated in the prefactual scenario (see Table 11).

Table 11: Group comparisons on number of acquisitive/aversive statements

	Group 1 (N=17) Mean (SD)	Group 2 (N=49) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Acquisitive Statements	2.41 (1.326)	2.41 (1.322)	0.010	0.496	0.00
Aversive Statements	3.18 (1.334)	3.61 (2.050)	-0.816	0.209	0.20

4.3   Themes to consider

An additional aim of the present study was to gain a further understanding of the experience of contemplating and, ultimately, making a transition away from independent living and into a more supported form of residential care. The above findings confirm that a significantly higher number of prefactual/counterfactual thoughts are being produced as individuals move along the TEMPO timeline towards older age, and a possible reality of facing a decision about future housing. Given this knowledge, it would seem prudent to further clarify the nature of the thoughts that might be experienced, both in terms of how they might relate to previous research and in terms of us gaining a richer understanding of the current themes and issues that individuals might face. This third section reports on some of the themes that emerged from the prefactual scenario in terms of what participants appeared to judge as important considerations for making such a move.

4.3.1 *Inaction versus action*

Interestingly, 51 (77.3%) of all participants (36.4% working-age, 40.0% older adults) identified that Joan would most likely feel better about her situation in the prefactual scenario. A summary of these responses can be seen in Figure 6. Of those participants identifying Joan as most likely to feel better, 38 (74.5%) identified themes of an easier transition, her having made a timely choice/decision, and reassurance that she had already accepted the need for help as being key. This might be thought of in terms of support for Gilovich & Medvec (1995) and Zeelenberg et al's (2002) assertions that it is typically our failures to act in a timely fashion that causes most regret.

Figure 6: Who will feel better about their situation?

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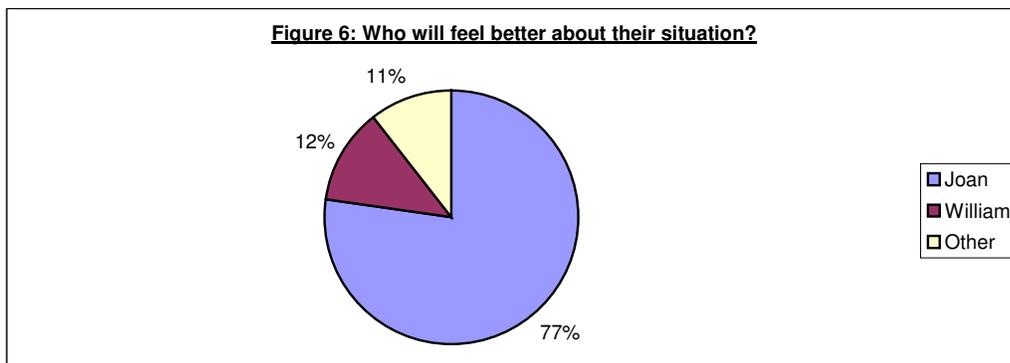
4.3.2 The experience of care

The statements elicited from the questionnaires suggested that the most dominant theme to emerge involved the experience of care. Included in this category was the perceived quality of care, the presence and continuity of care, the appropriateness of care, and the restrictions of care. In the sample of 13 questionnaires taken for triangulation by the research panel, the theme of care was included in approximately 13% of statements. Specific concerns raised by the older adult group included worries over the quality of care facilities in their local area. Further concerns were raised over the "zombie" states of the people who tended to reside in such facilities. Interestingly, the sentiments relating to care from the working-age adult group tended to centre more on the reassurance it would offer to family and the minimisation of risk to the individual, should their relative's health decline.

4.3.3 Proximity to and support from family

A common sentiment from the older adult group, in particular, involved a wish to be closer to family. Indeed, this theme was included in approximately 10% of the statements sampled from both older adults and working-age adults. In general, the working-age adult group expressed a similar sentiment in that they believed Joan or William being closer to family would enable them to have support and assistance in organising personal affairs and making the move. It was also considered that family could take on some of the emotional burden of this decision. However, a small number of people also expressed concern that family may unduly influence the decision of their relative and may force a decision to move out of obligation.

4.3.4 Help and support (or lack of it)

Approximately 10% of statements in the sample of questionnaires reviewed by the research panel included the theme of receiving help and support as an important consideration. From the working-age adult group, this included concerns that William, in particular, would not be able to help himself if he continued to refuse a move into supported housing or care. With regards to the older adult group, sentiments often expressed it being better to obtain support

from family and neighbours, home-help, or home-adaptations in order to remain as independent as possible for as long as possible.

4.3.5 Health (mental and physical) and mobility

Approximately 10% of statements in the sample included discussion of health concerns and mobility issues for the characters in the prefactual scenario. Both groups (working-age and older adults) indicated concerns that if their health should deteriorate, choice might be taken away in deciding where and when to move. A knock-on effect of this included concerns about ultimate locality since transport and mobility were thought to be problematic in some areas. Concern was also raised that, should their health suddenly worsen, there would be no-one present to help if they had not already moved to some form of supported housing. Some specific concerns raised by the older adult group suggested some more specific and quite extreme concerns such as developing Alzheimer's disease or experiencing a sudden death. However, some also expressed that this latter option might be for the best as a preference to them ever having to enter residential care. It might be considered that this latter point, again raised by members of the older adult group, could offer support to the findings of Scocco, et al (2006) who discussed the risk of suicidal ideation in residents of care facilities. This was thought particularly problematic among those most recently admitted.

4.3.6 Independence

Approximately 7% of statements in the sample included concerns raised about the loss of independence and the importance of being able to maintain independence in old age. This latter sentiment appeared to be one that was expressed in similar terms by both working-age adults and older adults. However, a further sentiment also expressed within this theme was the ability to come to terms with the loss of independence as time progressed.

4.3.7 Choice, Control, and Decision

A further theme that emerged from this sample involved being free to make a choice or decision over the move without undue external influence. Approximately 7% of statements in the sample included sentiments of retaining

control over this decision to move. Concern was expressed that it might be important to confront such circumstances sooner rather than later in order to have time to make an informed choice. In so doing, it was hoped that a move might be more easily accepted. This goal might be considered in contrast with Stilwell & Kerslake's (2004) findings that, in reality, only a very small number of people appear to make an active decision to enter residential care. For many, it appears that the decision to enter supported housing is seen as more a consequence of loss and deterioration in health, for example.

4.3.8 *Home ownership considerations, finances, and time*

Approximately 5% of statements in the sample included sentiments relating to the consideration of home ownership. In the first part, both working-age and older adults stated that being able to remain in their own homes for as long as possible, and not have to deal with strangers, would be a vital consideration. However, as health perhaps deteriorated, both groups expressed thoughts on how best to deal with the sale of each character's home (e.g. having relatives to assist them and to pass possessions on to; 2% of the sample considered this theme of 'downsizing' and having time to 'get things in order') and the implications this might have for their finances (2% of the sample raised this as a theme) and for 'means testing'.

4.3.9 *Coping ability, fortitude, and attitude to the move*

Approximately 5% of statements in the sample contained themes of coping ability in relation to the character's ability to look after themselves in their own homes as their health potentially deteriorated. An additional consideration within this theme concerned each character's potential fortitude in how they might retain their independence for longer by delaying a move from their own homes. A further 4% of statements contained themes relating to each character's attitude to the move. In general, it was considered that if either felt forced into a decision they were not happy with, they would be unlikely to adjust well to supported living. Instead it was considered that each would need time to accept their situation and, where possible, this process would be best supported by their families.

4.3.10 _Number of moves_

Approximately 3% of statements in the sample contained concerns raised about the number of moves that each character might have to undertake. Although the benefits of a transitional experience were heavily cited (see 4.3.1), particularly relating to Joan's situation, a small number did consider that having made a decision to move, and then potentially having to move again, would be highly disruptive and difficult to adjust to in old age.

4.3.11 _In-house care and home adaptations_

Approximately 3% of the sample raised themes in their statements relating to it being better if William, in particular, could have some home adaptations so that he could remain in his own home for as long as possible. Again, this theme related strongly to the issue of independence and how each character might best achieve this. Further sentiments, relating to both characters, concerned the issue of in-house care or home help, again so that they might remain in their own homes if they so chose. Certainly, it would appear that with the previous concerns raised regarding choice (see 4.3.7), it would be useful to give such options wider publicity in order to promote an informed decision that would be easier for the individual to accept.

4.3.12 _Risk, safety, and emergency care_

Approximately 3% of the sample raised concerns in their statements about the potential risk factors of the characters not accepting their deteriorating health and choosing to remain unsupported in their own homes. Amongst such sentiments, concerns were raised over choices being further limited if a resulting need for emergency care should ensue. In general, the working-age adult group appeared to relate the theme of risk and safety to the burden it would place on family members who would worry about their relative. However, they also considered the potential for the characters to be placed at further risk if they were to encounter incompetent or negligent carers once they had made the decision to move or accept home help. Indeed, this latter point is a consideration that has received a great deal of media attention over recent months (e.g. Bennett, 2009), raising significant public alarm.

4.3.13 *Emotional considerations and loss*

Approximately 3% of the sample raised the theme of emotional considerations such as loneliness, isolation, worry, and fear in being faced with this decision. Furthermore, 3% of the sample expressed concern that there was nothing worse than having to make this decision. Again, the sentiment of having family nearby to support their relatives through the emotional aspects of leaving their homes and making this transition was considered important. Similarly, being able to take certain possessions with them and pass certain possessions on to family were considered beneficial in making the adjustment process easier. This would also serve to address any potential for loss, which was a theme raised in 1% of the sample statements.

4.3.14 *Familiarity, locality, and social networks*

A final theme to emerge from the sample in relation to the prefactual scenario concerned sentiments of retaining familiarity in the individual's environment. Approximately 2% of the sample statements raised this consideration along with a further 1% of statements relating to the benefits of retaining close social networks in advancing age. Alongside the potential for community care support, it was considered that being able to retain close friends and a strong social network would promote resilience and independence in older age. Furthermore, should the decision eventually be taken to move into residential care, some individuals in the older adult group proposed that there would be more chance of the individual perhaps knowing people already in a local care home if they had remained in a familiar locality. This was again considered important in easing the adjustment period.

5   DISCUSSION

The discussion is split into five sections.   The first section covers summary characteristics of the sample. This is followed by a discussion of the main findings of the study.   The third section looks at each hypothesis in turn and reviews the findings in relation to previous research and possible clinical implications. Section four considers the limitations of this study. Finally, section five suggests possible ideas for future research.

5.1   Characteristics of the sample

As has been found in previous research, recruitment of the over 65-year-old group was somewhat difficult.   Of the 183 older adults who initially accepted questionnaire packs for this research, only 18% ultimately went on to complete the study. This is in considerable contrast to the 48 working-age adults who accepted packs and who had a successful return rate of 69%. Such a finding, as previously discussed, offers support for Harris and Dyson's (2001) observations that recruitment of an older adult sample requires considerable time allocation.   As indicated in this research, it also benefits from large numbers of contacts being made.

5.2   Main findings

The main findings of the study are summarised below in relation to each hypothesis in turn. Following this, a summary of the themes emerging from this study is outlined.

5.2.1   *Hypotheses testing*
The main findings of this study are summarised in Table 12. Subsequent to this, a further elaboration of these findings is presented.

Table 12: Summary of the findings from each hypothesis tested in the study

Hypothesis	Findings
Individuals moving closer towards the prefactual scenario will be more likely to express increased counterfactual and prefactual statements regarding a move to residential living.	Some support in terms of total number of character prefactual statements generated – medium effect size. Good support in terms of number of 'upward' character statements generated – medium to large effect sizes. No support in terms of number of personal statements generated – low effect sizes.
Individuals scoring low on measures of self-esteem will express more upward prefactuals regarding a move to residential living.	No support in terms of either character or personal statements generated – low effect sizes.
Individuals scoring high on measures of trait anxiety will express more downward prefactuals regarding a move to residential living.	No support in terms of either character or personal statements generated – low effect sizes.
Individuals scoring high on measures of pessimism will express more upward prefactuals regarding a move to residential living.	No support in terms of character statements generated – low effect sizes. No statistical support in terms of personal statements generated but small to medium effect sizes in favour of individuals scoring low in pessimism generating more statements.
Individuals experiencing low mood ('poor' mental health) will be more likely to generate more negative evaluations and experience more aversive simulations.	No support in terms of character statements generated – low effect sizes.
Individuals scoring high on measures of thought control, and who are also experiencing dysphoric mood, will experience more aversive mental simulations regarding a move to residential living.	No support in terms of character statements generated – low effect sizes.

Hypothesis 1 stated that individuals moving closer towards the prefactual scenario (T-1; Figure 4) will be more likely to express increased counterfactual and prefactual statements regarding a move to residential living. There was indeed some support for this hypothesis. The older adult group generated, on average, a significantly higher number of prefactual/counterfactual statements for the prefactual scenario of two characters (Joan and William) considering a move into supported housing. In addition, a medium effect size was detected between the groups for the total number of statements generated. Furthermore, there were medium to large effect sizes detected for the number of 'upward' statements for William and the total number of 'upward' statements generated for both characters.

There was no support for this hypothesis in terms of the number of personal prefactual/counterfactual statements generated by those individuals considering a move of any kind in the near future. However, those considering such moves were generally doing so willingly, on a voluntary basis, and were generally not making a decision to enter supported housing. Furthermore, and as reported in Section 4.1.1, it appeared that individuals who might have been considering similar moves to William and Joan may have declined to participate based on feeling it might be "too close to home."

Hypothesis 2 stated that:

a) Individuals scoring low on measures of self-esteem will express more upward prefactuals regarding a move to residential living. Groups were divided into high and low self-esteem as defined by a median split in the SES. There was no support for this hypothesis as significance levels and effect sizes were low. There was also no support for this hypothesis in terms of the number of personal prefactual/counterfactual statements generated by those individuals considering a move of any kind in the near future. Effect sizes for the number of personal statements generated were again very low.

b) Individuals scoring high on measures of trait anxiety will express more downward prefactuals regarding a move to residential living. Groups were divided into high and low anxiety as defined by a median split in the STAI. There was no support for this hypothesis as significance levels and effect

sizes were low. There was also no support for this hypothesis in terms of the number of personal prefactual/counterfactual statements generated by those individuals considering a move of any kind in the near future.

c) Individuals scoring high on measures of pessimism will express more upward prefactuals regarding a move to residential living. Groups were divided into high and low pessimism as defined by a median split in the LOT-R. There was no support for this hypothesis in terms of significance levels and effect sizes were low. There was also no support for this hypothesis in terms of the number of personal prefactual/counterfactual statements generated by those individuals considering a move of any kind in the near future. Effect sizes between the groups for the number of personal prefactual/counterfactual statements were low to moderate. However, this difference appeared to reflect that the low pessimism group were generating more statements than the high pessimism group.

Hypothesis 3 stated that individuals experiencing low mood ('poor' mental health) will be more likely to generate more negative evaluations and experience more aversive simulations. Groups were divided into 'poor' and 'good' mental health, with 'poor' mental health being defined as a score of 3 or more on the GHQ-12. There was no support for this hypothesis in terms of significance levels and effect sizes were low.

Hypothesis 4 stated that individuals scoring high on measures of thought control, and who are also experiencing dysphoric mood, will experience more aversive mental simulations regarding a move to residential living. Groups were divided into high and low thought control, as defined by a median split in WBSI scores, plus dysphoric mood (poor mental health), as defined in hypothesis 3. There was no support for this hypothesis in terms of significance levels and effect sizes were low.

5.2.2 Summary of themes

In terms of facing a decision of a move into supported housing, several themes seemed to emerge from the more qualitative aspects of this study, as verified through use of triangulation. However, it should be remembered that the thematic analysis was exploratory in nature and, subsequently, a number of themes are based on a small number of statements coded from the overall dataset. The identified themes will now be considered in terms of individual factors, social and family factors, and environmental factors.

5.2.2.1   Individual factors

It was interesting to note that the majority of participants in this study identified Joan as most likely to feel better about her situation since she was seen to have already chosen and made a transitional move to sheltered housing. Because of this it was generally thought that a move towards more care would not be such a sudden disruption from her previous lifestyle.   Indeed, several statements described her as having already "broken her attachment" with her home and her possessions. This might be considered in terms of support for previous assertions (e.g. Zeelenberg, et al, 2002) that the inactions of individuals are typically seen to hold potential for more long-term regret.

Further considerations that might relate here concern the emotional needs of the individual and how they might manage their perception of any potential for loss. Also, how they might best appease their worries over potential loneliness, isolation, fear, and trauma that might inhibit their ability to make an active choice about future living arrangements. Since several statements from both older adults and working-age adults seemed to express how they believed nothing could be worse than making this decision, the potential for inertia in identifying appropriate choices is perhaps in need of further thought. This may be particularly so given Gilovich and Medvec's (1994) consideration that when people manage to act, they overcome any inertial forces holding them previously in place. They are then more able to enter a new world where further change and action is easier to make. Thus themes of choice, control, and independent decision-making would be easier to fulfil and maintain.

A further factor that might be associated with the individual relates to the possible effects of a sudden deterioration in health. This was particularly in relation to the limited choice this might impose if emergency care were necessary. Some of the more specific reservations relating to health concerned the development of illnesses such as Alzheimer's disease. The possibilities of experiencing a sudden death were also discussed. Indeed, this latter point was seen as preferable in some ways by a small number of the older adult group. This might be considered in relation to potential risk of suicidal ideation amongst individuals having to contemplate such a move. Certainly, from a clinical perspective, such knowledge is vital in the context of risk assessment and risk management.

The ability to maintain independence, where possible, in older age was a strong consideration implied in many participant statements. However, a further concern was how best to manage some loss of independence as time progressed. This might be thought of in terms of the tension between maintaining acceptable levels of autonomy and dependency in older age. The ability to make an informed decision, within one's control, and of free will was a theme implied in several participant statements. Having time to make such choice was a factor within this theme. This finding might be considered in relation to previous conclusions that few people make an active decision to move into supported housing. In general, it appeared that study participants considered it beneficial if the characters could take as much time as possible to consider an appropriate move.

Several considerations implied by participants concerned the individual's coping ability, their resilience, and their fortitude. These factors were discussed in terms of the individual's ability to look after themselves in their own homes, and retain their independence for as long as possible, as their health potentially deteriorated. Further considerations involved each character's attitude to the move. In general, it was considered that if either felt forced into a decision they were not happy with, they would be unlikely to adjust well to supported living. Instead it was considered that each would need time to accept their situation and, where possible, this process would be best supported by their families. In terms of wider support for such individual challenges, Knight (2004) proposed a contextual, cohort-based, maturity, specific-challenge (CCMSC) model that emphasised the contextual

influences, cohort differences, and the nature of the challenges faced as opposed to inevitable and stereotyped maturational changes. Such models certainly present a more positive view of the ageing process that take into account many of the individual challenges and themes raised.

5.2.2.2 *Social and family factors*

A dominant theme to emerge from participant statements concerned how close any moves would be to family, so that support might be obtained from loved ones. Further considerations involved many of the older adult group expressing a desire to maintain and strengthen a close family network in their older age. However, in a small number of cases, the prospect of family having undue influence over the decision to move was also considered. Indeed, this latter concern was often verified in terms of individuals suggesting they felt it would be unfair to burden family unnecessarily with worries about their care. For the working-age adult group, many expressed a similar sentiment, though more in terms of having to take on responsibility for the care of their relatives. With such sentiments in mind, it seems understandable that there could be perceived emotional influence over a decision to move.

The consideration of other sources of help and support was also apparent in participant statements. Concern that the characters in the prefactual scenario, if they continued to live alone, would not have help and support appeared a noteworthy theme. In the older adult group, it appeared that the ability for the characters to continue to help themselves, e.g. through home help and adaptations and community care support, would be most preferable in terms of maintaining independence for as long as possible. Aside from that, the help and support of family, close friends, and neighbours was also reiterated in terms of the resilience that might be supported in older age.

5.2.2.3 Environmental factors

Perhaps the most dominant theme to emerge from this study concerned the experience of care. This category included statements relating to the quality of care, the risk of potential neglect by carers, the presence and continuity of care, the appropriateness of care, and the restrictions of care. The older adult group appeared to generate several concerns relating to their perceived experience of care whereas the working-age adult group often appeared to consider more the reassurance it would offer family members. This might be considered in terms of perceived influence of family in making such decisions, as outlined above.

As previously noted, use of home adaptations and home help were thought vital considerations in terms of the individual remaining in their own home for as long as possible. Several statements expressed that being able to consider such options with family would be highly beneficial and might offer reassurance to all those concerned. In general, it was apparent that although the majority of participants considered a transitional move, such as Joan's, to be beneficial, a small number expressed that having to make several moves would be highly disruptive and should be something to avoid in older age. In these cases, it was expressed that the ability to "stick it out" in the individual's own home, until there were no other options or adaptations that could be made, would be preferable. It was then hoped that any final move to a care home would be the only move/adjustment they would have to make.

A small number of the older adult participants also expressed concern over the location of supported housing in their areas. Issues of restricted mobility, as a result of poor location, were noted. Some of the more specific concerns under this heading involved having time to research the chosen area of supported housing to be sure that there was adequate access to bus routes, shops, and community facilities. Further inquiry might also take into consideration any individual housing scheme activity programmes and how they might go about supporting and promoting autonomy and independence. This may be particularly so given the concerns raised regarding current care provision often being seen as providing residents with little stimulation.

The importance of how to retain some degree of familiarity in the individual's environment was a further consideration raised in participant statements. For example, some statements discussed whether pets would be allowed to accompany their owners, and also the possessions that might be taken. Of course, the most desirable outcome was for individuals to remain in their own homes for as long as possible, with the help of in-house adaptations and possible community support. However, also proposed was how each character in the prefactual scenario might best manage the timely sale of their home and the downsizing of their possessions. Some further thoughts from the older adult group concerned the issue of 'means testing,' and the potential impact this might have on the sale of their estates and on their future finances. Indeed, this latter point appeared to be an issue that raised some considerable ill feeling amongst certain members of the older adult group.

5.3   Implications of the findings

This section will now review the possible implications of findings from this study in relation to previous research and the potential impact on clinical work.

5.3.1   _Impact on research_

A review of findings in relation to the general investigation of counterfactual statements, and to each hypothesis and potential impact on field research, will now be considered. Similarly, a review of themes emerging from this study will also be considered in relation to existing research.

5.3.1.1   _The investigation of counterfactuals_

The vignette used to investigate counterfactual thinking in this study was written in line with examples laid out in Roese and Olson's (1995) book. This vignette (prefactual scenario) was designed to elicit thoughts of who would feel better or worse (Joan or William), which was a method used previously by authors such as Gilovich and Medvec (1995). For the purposes of this study, this prefactual scenario was then followed-up with questions of what could be better or worse about each character's impending situation. The reasoning behind this was to

encourage the generation of upward or downward prefactual/counterfactual statements, respectively. This was particularly relevant for, and original to, the design of this project since at the time this study was undertaken it appeared there were few examples of how specific prefactual/counterfactual statements might be elicited within the literature.

Previous research has wondered how prefactual/counterfactual thinking might be investigated in people actually experiencing a certain event (e.g. Davis & Lehman, 1995). Again, this was something that this project hoped to tackle, to some extent, through making use of the TEMPO model (Sanna, et al, 2006). The application of the model in this study was designed to investigate how people moving closer to, and therefore thought more able to identify with, a specific scenario might experience prefactual/counterfactual thinking, as ascertained through their written statements. In an effort to obtain further examples of people moving closer to such a scenario in real life, further information was elicited from participants as to whether they too were considering a move. The aim of this was, in part, that if enough people were considering a similar move into supported housing, further analysis could be used to establish whether this group represented an even closer step from T-1 towards T0 in Figure 4. However, in practice, the numbers of people considering a move were very small and only two individuals were contemplating some form of supported housing. Therefore this degree of personal experience could not fully be explored within the remit of this thesis.

5.3.1.2   The impact of time

The main purpose of this research was to examine whether individuals moving closer to a specific prefactual scenario, in this case involving a move in older age to supported living, would express more prefactual or counterfactual statements in terms of what may be or what might have been, respectively. This hypothesis (hypothesis 1) had been based on the theoretical framework of models such as the IGoA model (Sanna, et al, 2003) and the TEMPO model (Sanna, et al, 2006). In both cases, the models had placed counterfactuals into a broad integrative framework where temporal considerations, in terms of the knowledge of only a limited amount of time to achieve certain goals, could be explored.

The results of this study suggest that moving closer towards a prefactual scenario of considering a move into supported housing does seem to induce more prefactual/counterfactual thinking in terms of the number of statements generated by an older adult population. Such a finding would appear to lend support to research by Gilovich, et al (1993), who argued that there appeared to be a systematic relationship between an individual's confidence that a desired outcome would be realised and their temporal proximity to the critical moment in question. This would seem to be further supported by additional analyses in this study that reveal the older adult group generating, specifically, a significantly higher number of aversive simulations than the working-age adult group (see Table 13, Appendix 15). Based on Sanna, et al's (2006) definitions relating to the TEMPO model, this would suggest more focus on the avoidance of negative future predictions in the older adult group.

It would appear that the above findings would lend credence to Shepperd, et al's (2000) findings that individuals appear to have a tendency to 'brace for the worst' in anticipation of an event that has the potential for loss. This is thought to be the case where the need is great (here a loss of ability to continue coping without support, health needs, etc.) and the event is considered high impact (e.g. loss of independence, loss of home, need for considerable adjustment, etc.). It would seem that such findings would sustain the argument laid out in the introduction that a move into supported housing might be considered both high need and high impact, particularly for those individuals who perhaps feel closer to such a scenario. Furthermore, the findings from Table 2 also lend support to Sanna, et al's (2006) suggestion that there is perhaps a specific tendency towards more upward mental simulations from T-2 to T-1. The findings would also tend to suggest that Carstensen, et al's (1999) proposals of advancing age focusing the mind more on the present, with little concern for future scenarios, could be somewhat flawed. Similarly, previous explanations of 'the positivity effect' and old age being a time of great contentment might also require further work in terms of the potential impact of increased numbers of aversive simulations when considering future high need and high impact scenarios.

5.3.1.3   The impact of personality

In terms of exploring the personality aspect of the TEMPO model (Sanna, et al, 2006), a limited number of possible personality factors were analysed. These specifically focused on the impact of low self-esteem, high trait anxiety, high thought suppression, and high pessimism, as laid out in the introduction. The findings from this study have not been able to offer support for any significant impact of the above personality factors within the TEMPO model. One possibility for this finding could involve the theoretical nature of the TEMPO model in setting up a framework or an understanding of counterfactual statements. While the time aspect of prefactual and counterfactual thinking had previously featured as a part of other models (e.g. the IGoA model, Sanna, et al, 2003), it appeared that some of the other aspects of the TEMPO model, such as personality, were more recent additions. Although the reasoning behind such additions would appear sound, it might be plausible to consider that such elaborations of the counterfactual framework may yet require further investigation.

With the above in mind, it is, however, questionable whether one of the limitations of this study involved a difficulty for how well connected each participant felt with the reality of the prefactual scenario. Since it was expressed by some of the individuals who dropped out of the study that they had done so because it felt "too close to home," it could be possible that those who did participate felt somewhat more removed, or disconnected, from the scenario. As a result, any tendency to 'brace for the worst' or make use of 'self-protective' simulations may not have been personally activated.

5.3.1.4   The impact of outcome

With regards to the outcome aspect of the TEMPO model (Sanna, et al, 2006), again a limited part of this feature was explored in terms of the impact of mood (mood as input, Sanna, et al, 2006). Again, the findings from this study have not been able to offer support for any significant impact of the above outcome factor within the TEMPO model. Similar to the impact of personality, it is possible that outcome, again appearing a relatively new consideration in the counterfactual framework, has had limited opportunities for real world testing. However, it could

also be a further incidental finding of this study that the personal identification with the prefactual scenario was not apparent. In this case the tendency to view one's life in a negative way in bad moods and in a positive way in good moods (Sanna, et al, 2006) would not necessarily have been activated on behalf of the characters in the scenario.

5.3.1.5 The impact of individual factors

As previously suggested by Gilovich and Medvec (1995), and as emerging from the findings of Zeelenberg, et al (2002), this study would seem to support the assertion that it appears to be the inactions of individuals that are thought to lead to more regret than their actions. Indeed, 77% of participants identified "Joan," a character who was seen to have taken some action towards planning and making a move, as more likely to feel better about the situation (having taken some action) than "William" (who had taken no action to plan and make a move). This might be considered in contrast with the findings of Stilwell and Kerslake (2004), that few individuals make an active decision to enter residential care. However, given that one of the themes to emerge from statements has involved wanting to take as much time as possible to come to terms with one's situation, and to consider future action, it would appear that the impact of potential inertia in terms of considering one's options may require further thought. Indeed, this observation might also be linked with the suggestion of individuals dropping out of this study if they perceived the prefactual scenario to be "too close to home." It would appear from this study that individuals often prefer to put off thinking about undesirable situations, such as a need for residential care. However, such avoidance also has the potential to hold them in the grip of inertial forces (Gilovich & Medvec, 1994) where the ability to act and assume some control over change might be limited.

The emotional needs of the individual contemplating such a move from independent living was an additional theme to emerge from participant statements. This might be linked with the findings of Parnell (2005), who reported that loneliness and helplessness were common responses to the losses associated with a move to institutional living. Similarly, Jongenelis, et al (2004) highlighted the risk of depression and other mental health problems in a nursing home population. Indeed, it was identified in certain statements that some individuals could not

imagine anything worse than having to make a decision like the one described in the prefactual scenario. In some cases, death was seen as preferable. It would certainly seem that such statements need further attention in terms of the risk of suicidal ideation, and possible action, amongst members of this population (e.g. Scocco, et al, 2006). As some participants expressed, how to come to terms with the potential for loss is also in need of further exploration. Certainly, it is possible that scenarios evoking strong emotional reactions need more time to be reasoned through. After all, the negative effects of experiencing large numbers of aversive simulations are likely to require considerable emotional processing.

5.3.1.6 *The impact of social and family factors*

A small number of personal statements, elicited from participants in this study, appeared to raise the potential for life-review from how an individual might meet future housing needs. This was a factor considered in the introduction in terms of the potential for such an occurrence at times of major crisis, important decision, or prospect of ill health (Garland & Garland, 2001). Several members of the older adult group indicated that they currently lived in scattered family networks and how they would ideally wish to be closer to their families. Considerations of past moves were often mentioned and any thoughts of future moves were primarily focused on family. However, such participants often then appeared to discuss how they would not wish to burden their families and how important they realised it was for families to follow their own directions in life. Several also expressed how difficult they realised modern life was for their loved-ones. In many ways, it appeared that such statements offered a form of 'mood repair' from the wistful desire for things to be different and for family networks to be closer. It is perhaps conceivable that this lends credence to Wrosch, et al's (2005) findings that older adults generally report fewer opportunities to 'undo' their most regretted actions or inactions. It may, therefore, be conceivable that strategies such as mood repair are more commonly resourced amongst this group.

One of the few concerns in a small number of participant statements, which related to family, considered the possibility that family might have undue influence on any decision to move away from independent living. Concerns were also expressed that many individuals would not want to place unnecessary burden on family

members if they did not make a 'sensible' decision to accept support and care. Such observations might be linked with the findings of Laming (2004) who supported that people in uncertain states of mind can be highly vulnerable to suggestion. However, they are sometimes unaware that such influence has occurred.

5.3.1.7   The impact of environmental factors

As indicated in the introduction, older people who are affected by adverse life changes, such as illness and bereavement, are likely to experience a significant impact on mood. They are also likely to find these events occurring in close proximity to a need for significant adjustments to their living arrangements. The experience of care was a dominant theme within this study. Indeed, the unpleasant reality of some care home and residential support experiences is something that has received considerable media attention in recent months (e.g. Bennett, 2009). As a result, it would appear that both the working-age adult group and the older adult group are now prominently aware of concerns over the risks of becoming dependent on carers. The impact of such environmental pressures and time constraints has previously been discussed within the TEMPO model (Sanna, et al, 2006) in terms of the limitations it can place on the use of affective assimilation strategies as part of an individual's ability to maintain positive well-being (McMullen, 1997; Sanna, 2000). It could therefore be conceivable that any pressures or constraints in making such an important decision regarding future living arrangements may unduly limit existing methods of coping.

It is possible that the above findings could offer an account for the findings of researchers such as Jongenelis, et al (2004), who reported that depression in the nursing home population was very high. Certainly, it is conceivable that individuals who feel they have diminished capacity (Lott and Maluso, 1995) for coping may develop feelings of powerlessness and a sense of learned helplessness with regards to how they might adjust to any perceived loss of independence. Parnell (2005) implied that a sense of powerlessness arose as a result of feeling unable to make choices in daily living as one adjusted to the restrictions of a residential culture. Certainly, a significant theme that has arisen from the more qualitative

aspects of this study concerns a number of participants wishing to explore the options of home help and home adaptations in order to manage independence and choice for as long as possible within each individual's own home.

5.3.2 *Clinical implications*

A review of findings in relation to the clinical implications of this study will now be considered. Similarly, a review of themes emerging from this study will also be considered in relation to the clinical implications involved.

5.3.2.1 *Time and the positivity effect*

It is possible that the significantly higher number of prefactual/counterfactual statements generated by the older adult group could suggest a mind that is more focused on, and consequently more able to express in this study, the possibilities the prefactual scenario may bring. Consequently, the argument that with advancing age comes a tendency to focus more on the present, with little concern for future scenarios, would appear somewhat flawed. As previously discussed, further analysis (Appendix 15) has demonstrated that the older adult group specifically expressed significantly more aversive prefactual/counterfactual statements than the working-age adult group with regards to the prefactual (future) scenario. With this in mind, it would be worth also considering that people who are very emotionally reactive are thought to experience a high number of aversive thoughts. As a result, they may engage in a range of strategies in an attempt to alleviate the distress associated with such aversive thinking (Najmi, Wegner, & Nock, 2007). Consequently, it would appear somewhat naïve to unquestioningly accept that older people should be experiencing some kind of 'positivity effect' (Mather & Carstensen, 2005) in old age when we also consider evidence suggesting that mental health issues are often not recognised and frequently remain poorly treated within nursing homes (Jongenelis, et al, 2004) and in older age in general (Age UK, 2009).

5.3.2.2 *Care provision and financing*

Another point frequently commented on was how people could not imagine anything worse than having to consider a move into supported housing or

residential care. Given the recent media publicity surrounding the state of care for the elderly in some areas (e.g. Bennett, 2009), and given concerns frequently raised by relatives groups and the Age Concern England (2008) "Q is for Quality" report, it is perhaps understandable that people feel very strongly about any possible need to rely on care provision. It seems that, where people are typically calling out for consistency, continuity, and quality in their care, they are often left facing a stark reality of overstretched and inadequate service provision (Age Concern England, 2008).

With the above in mind, it is worth noting that care services are typically dealing with some very distressing and difficult issues, such as dependency, infirmity, and death. Given this reality, it is perhaps not surprising that older people find it emotionally difficult to consider any need for such care provision. Furthermore, institutional ageism often prevents people seeing the emotional needs of older people who are moving accommodation. In addition, the presence of possible 'splitting' (Klein, 1975) between staff and residents may further inhibit the ability for emotional needs to be recognised. Certainly it is interesting to note that such defences have long been acknowledged within health care systems (e.g. Menzies-Lyth, 1988) in terms of care provision often being split up into impersonal elements, which may stem from an unconscious institutional need to keep human suffering at a distance.

Further concerns raised in this study brought up worries over finances in terms of how to fund care and the impact of means testing. Certainly, this finding would seem to echo Age Concern England's (2008) report of care being expensive and the current system appearing to penalise those who save. In general, it would seem that, with the above issues in mind, the current system of care and support for older adults in England is in need of significant review.

5.3.2.3   Access to information

It is evidently difficult to predict when an individual might feel a need to plan for a move since there are multiple personality and social factors that first require consideration. For example, whether an individual is a 'confronter' or an 'avoider' in terms of whether they prefer to face issues 'head on' or tend to postpone a need

to deal with them, respectively. Also requiring consideration is whether they have existing family and support networks in place. However, one of the themes to arise from this study has involved giving oneself as much time as possible to consider and to research the most appropriate move. Age concern have recently launched a campaign for national and local government to support independent services in offering a range of information, benefits, and services in one place (Age UK, 2009b). The intention would be that such information would include advice on housing and overcoming isolation. Certainly, it would seem from this study that more widely publicised guidance would be appreciated in order to improve quality of care and access to information at the point it is required.

5.3.2.4   *The experience of care and support*

Age UK (2009b) highlighted how maintaining independence has been one of the main issues raised by older people in discussions over care and support. Certainly, this would appear to be a sentiment also echoed as a main theme of this study. However, the reality of maintaining such independence within a care environment is an area that is often found lacking (Age UK, 2009b). In the first instance, a frequent comment within this study involved a wish for home adaptations and home support so that individuals could manage in their own homes for as long as possible. On a similar theme, it also appeared that reliance on, and proximity to, family and close social support networks were also primary considerations. However, the Age UK (2009b) report highlighted how support for the relatives and friends who provided care and assistance, so individuals could remain at home, was often sorely lacking. Again, improved access to information and training was called for to help ease this issue and promote an improved quality of carer support. After all, as one participant from the older adult group highlighted, "with the help from carers there is also less drain on the resources of the authorities." Certainly, when we consider that carers are estimated to save our economy some £87 billion a year (Williams, 2009), it would seem a valid calling that far more consideration needs to be given to carers within England.

It would seem that, from the point that a decision has been made to enter a residential care facility, an important focus, both for the individual entering care and their family members, might consider how much involvement and input they can

have into the care environment. On this note, LaBrake (1996) previously highlighted the importance of resident and family panels in helping to keep the individual connected with the past, present, and future, as well as keeping them at the centre of more individualised care programmes. With this level of involvement, enquiries might also be made as to the types of activities on offer for residents and further suggestions can be made based upon individual interests and preferences. Certainly, it would seem that such thinking might also offer some steps towards improving and maintaining familiarity within a new living environment, which was a frequent concern to arise from this study. Furthermore, with such encouragement for more personal input, it would be possible to develop a far more individualised range of reminiscence materials, for example, that might help to alleviate some of the feelings of loss and separation from one's past. It might also address the, sadly all too common, belief from one member of the older adult group, who had lost his wife to Alzheimer's disease, that days within a care environment will merely be spent "in a semi-comatose state (with the help of zombie drugs) sitting in the front of a flickering television in the corner of the 'Day Room'!"

5.4   Limitations of the present study

Some limitations of the present study will now be presented, which may, to a certain extent, have had a confounding effect on the results.

5.4.1   *Time*

Despite some considerable time limitations, this study was able to reach the desired level of power. Of course, it would be preferable to allow even further time for the continuation of the data collection phase of this study, and thus further boost power. However, the restrictions of working within the confines of the research timetable of a DClinPsy training programme have not made further data collection possible at this time. Despite this, it is the intention of the Primary Researcher, and the research panel, that data collection will continue into the future in order to improve the power and quality of this study, and in order to learn more from the extensive findings obtained.

Further difficulties relating to time came from the more unforeseen obstacles that perhaps seem an inevitable part of research. Whilst it had always been appreciated that data collection involving the older adult group would require a considerable amount of time, there were other aspects of this research that came more as a surprise in terms of the delays imposed. For example, in terms of obtaining certain measures requiring official purchase, some severe delays were encountered. This was particularly problematic in the case of obtaining the STAI (Spielberger, et al, 1983). Indeed, it appeared that many individuals were experiencing similar delays in obtaining this measure, both for research and clinical purposes. After some months' delay, permission was granted to reproduce a limited number of forms ourselves. However, such difficulties caused significant delay to the data collection phase of this study, which made it problematic to boost power through further recruitment.

5.4.2 *The investigation of counterfactuals*

At the time of conducting this research, it appeared that one potential limitation for this study was there being no real precedent set for the exploration of the TEMPO model (Sanna, et al, 2006) in terms of how one might go about drawing out specific prefactual/counterfactual thoughts. It seemed that past studies had frequently asked individuals to consider two individuals who each face a particular challenge from differing perspectives. However, such studies were typically limited to simply ascertaining who might feel better or worse in order to learn the types of situation that might promote more of a regret focus. This study, instead, attempted to take the further step of identifying the specific thoughts and reasoning individuals might have about each character in the prefactual scenario. While a few studies (e.g. Epstude & Roese, 2008) have attempted to make use of sentence stem completion, e.g. complete the sentence "if…" with focus on how things might have been different, this did not seem entirely appropriate for our investigation of the TEMPO model. The reasoning behind this was that we had wanted to allow individuals more freedom to use a range of upward or downward prefactual/counterfactual thinking strategies, as they saw appropriate and as best expressed in their own way. In general, it appeared that, although the specific use of sentence stem completion within this study would certainly have made the quantification of statements far simpler, hence this being thought of as somewhat

of a limitation to data analysis, it would also have potentially limited the natural reasoning strategies involved for each individual.

5.4.3 *Research delivery*

The use of questionnaire packs as opposed to face-to-face interviews was a further limitation of this study. It is likely that return rates of questionnaires and elicitation of statements might have been further improved had the researcher sat with each individual who opted in to this study. However, in practice, the option of the researcher sitting with each participant was always on offer to each individual. Despite this, it more seemed that few individuals wished to access this support in completing the forms. Instead, it appeared that the preference was more towards taking the questionnaires away to consider in their own time. Since this possibility had been anticipated, and in order to boost recruitment numbers wherever possible, the questionnaires were designed to accommodate either being taken away for individual completion or for researcher-supported completion.

Given this method of service delivery, it should be considered that some participants could have had a limited, or at least differing, understanding of the task requirements. It is the belief of the Primary Researcher that this may have been echoed in the way that some individuals commented they found it somewhat ambiguous as to what, precisely, the questions in the prefactual scenario were asking. For example, if they were asking whether something *should* or *could* be better or worse (more of a prefactual focus) or whether the questions were asking them to consider what *was* better or worse (more of a counterfactual focus). Despite this, the majority of participants went on to complete the forms in the intended manner, i.e. with more of a focus on what could or should be better/worse. Furthermore, the use of triangulation between researchers served to improve the trustworthiness of classifying participant statements. However, it should be considered that, had the researcher been present to assist with each questionnaire pack, it might have been possible to obtain a more uniform understanding of task requirements that may, again, have improved our ability to accurately quantify statements.

5.4.4 _Statistical analyses_

It should be noted that there were a considerable number of Independent-Samples T Tests conducted in an effort to test the specific hypotheses generated from the TEMPO model. Referring to hypotheses 1 and 2, ten Independent-Samples T Tests were conducted for each of these hypotheses in an effort to test the various types of character and personal prefactuals. In an effort to correct for any familywise error, the Primary Researcher did consult over the possible use of the Bonferroni correction. This is a multiple-comparison correction used when several dependent or independent statistical tests are being performed simultaneously. It is calculated by dividing the alpha level (here set at <0.05) by the number of tests being run (in this case 10 for each of hypotheses 1 and 2). The result of this is the new alpha level (here <0.005). In tightening the alpha level in this way, we are decreasing the risk of making a type 1 error.

Inevitably, such an adjustment would have impacted on the significance of some of the main findings. For example, if the alpha level had been adjusted to <0.005 in this study, the significance of the number of upward prefactuals for William, along with the total number of upward prefactuals for both characters, would still have been proven. However, in terms of the main focus of hypothesis 1 (i.e. total number of prefactual statements (upward and downward) generated by the older adult group in comparison with the working-age adult group), which had been predetermined by the predictions of the TEMPO model, this finding would have been sub-significant ($p=0.047$). In general, it was considered that such corrections on specific predetermined hypotheses might be too stringent. However, it remains prudent to note this as a possible limitation that would, perhaps, benefit from further recruitment to this study in order to clarify any ambiguous statistical outcomes.

A further possible limitation might relate to how much emphasis can be placed on the independent outcomes of the dependent variables (i.e. number of upward statements for Joan, number of downward statements for William, total number of upward/downward statements, etc.). A matrix of Pearson's r correlations is presented in Table 14 (Appendix 16), which demonstrates that a number of the

dependent variables intercorrelate quite highly in the case of the prefactual scenario. An example of this is in the case of William Upward Prefactuals and Total Character Upward Prefactuals (r=0.79). Such a finding is not entirely unexpected given that both relate to the generation of upward prefactual statements. However, it remains worth noting since such mutual relationships may explain why some highly intercorrelated variables have resulted in similar statistical outcomes.

5.5 Further research suggestions

Proposed here in the final section are some possible avenues for further research arising from the present study. The first idea relates to a replication and continuation of the present study that attempts to control for the identified limitations. The second possible area for further research concerns the potential impact of prefactual/counterfactual thinking on action and behaviour. A final area for further thought relates to an extension of this study that seeks to gain further experience of movement along the TEMPO timeline (Sanna, et al, 2006) and, it is hoped, further experience of personal identification.

5.5.1 *Replication and continuation of the present study*

It is apparent from the above highlighted limitations that, with more time and resources, this study could be replicated with a number of improvements to the recruitment process and the procedure. Primarily, it would seem that with more time, many of the above difficulties could be adequately resolved. As a result of this, and as previously discussed, it is the intention of the research panel that data collection for this study will continue for some time in order to add power to this project and to learn more from these findings. It is evident that there are a number of issues raised by participants in this study that warrant further attention. On this note, a paper has now been accepted for presentation at the British Psychological Society Cognitive Psychology Section Annual Conference 2009, which focuses attention more on the findings of hypothesis 1 in terms of the cognitive processes that might be attached to an individual contemplating a move from independent living.

5.5.2 _Potential impact of prefactual/counterfactual thinking on behaviour_

Other research might look at the types of counterfactual thinking in terms of their potential impact on action. In many ways, this follows on from the suggestions of Wong and Kwong (2007) who believed that the experience of anticipated regret potentially held a key role in how we make decisions. Certainly, one highlighted area of interest from this study concerns the concept of inertia. While several participants recognised how important it was to allow as much time as possible to make any decision over where to live, there was also some conflict indicated by those (several) individuals who also indicated that they could not imagine anything worse than having to think about a move. Certainly, this was a similar sentiment echoed in many of the 'recruitment drives' for this study. It is also interesting to note, within this context, that the older adult group did generate a significantly higher number of aversive simulations (Table 13, Appendix 15), which suggests the prefactual scenario perhaps created more of a need to avoid or protect against negatives (Baumeister, Tice, & Hamilton, 1989). With this in mind, it might be of particular interest to further investigate any potential impact of a tendency towards more aversive simulations, such as catastrophizing and self-protection, in terms of impact on action and behaviour.

5.5.3 _A further extension of the present study_

A further area that would be interesting to explore involves one of the original aims for this study, which was to also include a group of individuals who were considering, or who were making, a move to supported housing or residential care. This would be in effort to explore whether further changes in thinking occur from positions T-1 to T0 along the TEMPO timeline (Sanna, et al, 2006). Indeed, it may be that asking people to do scenario building in imagination is less effective at eliciting statements than when they are actually experiencing an event personally. However, despite approaching a range of sheltered housing schemes, and despite several agreeing to support the research, only one or two forms were ultimately returned from this group. Again, in terms of the "Research Delivery" limitation discussed above (Section 5.4.3), having increased time for further researcher contacts, and encouragement for the researcher to remain with participants, may have considerably aided recruitment of this group. Certainly, it would appear that a considerable amount more time would need to be put aside for data collection and

support of what might be considered a more vulnerable group. Particularly so if we also consider the reasoning for some individuals dropping out of this study was that they found the prefactual scenario a little "too close to home" and too distressing to think about given their current personal circumstances.

6   CONCLUSION

In support of the 'Time' component of the TEMPO model, the findings of this study indicate that individuals moving closer through time towards a specific prefactual scenario generate more prefactual/counterfactual statements. In the case of this study, the specific prefactual scenario involved a move into supported housing / residential care, while the movement through time was represented by comparison of a working-age adult group against an older adult group. A further finding of this study has revealed that the older adult group generated, specifically, more 'upward' prefactuals. This is an important finding given that 'upward' (how things could have been better) simulations have been associated with regret and anxiety about one's future (Shepperd, et al, 1995; Zeelenberg, et al, 2002) as well as also being associated, in other circumstances, with more positive simulations of "self-improvement" (Sanna, et al, 2006), for example. However, if opportunities to 'undo' or improve on regretted actions are seen as limited, which can be the case in advancing age, this can lead individuals to experience lower levels of mental well-being (Torges, et al, 2008).

In terms of further clarification, findings from this study have also indicated that the older adult group generated, specifically, more aversive simulations (i.e. focused on avoidance of negative future predictions). However, regarding participants' personal reflections of what could be better or worse about their circumstances, no significant differences were detected between the two groups (working-age adults vs. older adults) in the small number who completed this section of the study. The possible reasoning behind this finding has been linked with the difficulty encountered in recruiting older adults in research, particularly those who might be facing a similar scenario of a move to supported housing or residential care. Indeed, this latter problem with recruitment would appear to lend support to Harris and Dyson's (2001) findings that there has been a considerable under-representation of older adults as participants in research, and recruitment of this group is seen to require considerable time allocation.

In terms of the investigation of the 'Personality' and 'Outcome' components of the TEMPO model, no significant differences were detected between the two groups

(high scoring vs. low scoring) for the impact of self-esteem, trait anxiety, pessimism, and thought suppression. Furthermore, there were no significant differences detected for the impact of mood. This was the case for both the prefactual character scenario and for personal scenarios. The reasoning behind this finding has been linked with the possibility that the comparatively new additions to models of counterfactual generation, such as 'Personality' and 'Outcome' in the TEMPO model, stem from relatively new theoretical reasoning. Consequently it could be possible that they simply require more time to be explored and substantiated in terms of possible effects. However, it could also be a limitation of this study that individuals who perhaps felt more 'connected' with the prefactual scenario declined to participate, fearing it might be "too close to home." As a result, participants may have felt more 'disconnected' from the scenario, and any tendencies towards self-protective simulations, for example, may not have been personally activated on behalf of the characters described.

In addition to the tests carried out on the TEMPO model, this study also revealed a range of themes that participants suggested were important considerations. These statements were discussed in terms of three overarching themes; namely, the impact of individual factors, the impact of social and family factors, and the impact of environmental factors.

In terms of individual factors, perhaps one of the main findings to emerge from this study relates to support for the inactions of individuals being regarded as most likely to be regretted in the long term (Gilovich & Medvec, 1995; Zeelenberg, et al, 2002). This finding emerged from the majority of participants believing Joan, a character who had chosen to make a transitional move, to feel better about her situation (having acted) than William (who had resisted making any decision to move). A further finding explored within the theme of the individual relates to the considerable emotional impact implied by participants. Of particular concern was the support found in statements for the risk of depression (Jongenelis, et al, 2004) and suicidal ideation (Scocco, et al, 2006) amongst a population reflecting on future living arrangements in old age. It certainly seems that such information warrants further attention, particularly from a clinical risk management perspective.

With regards to social and family factors, one of the main concerns of participants was how close they would be to family if they were to consider a move in old age. However, this wistful desire often appeared to be regulated by attempts at 'mood repair.' Such a strategy typically emerged in the form of individuals writing that they did not wish to burden family members and that they wanted their relatives to follow their own directions in life. This information has been linked with suggestions by Laming (2004) that people in uncertain states of mind might be highly vulnerable to suggestion. This is particularly relevant given that a further sentiment echoed in participant statements involved a desire to retain choice, control, and the ability to make an independent decision without undue influence from external sources.

Finally, with reference to environmental factors, one of the main issues to emerge related to the quality of care and the experience of service provision. Interestingly, a great deal of media attention has recently focused on the unpleasant reality of many experiences of care provision (e.g. Bennett, 2009). Certainly, it would seem that such concerns have been echoed in many of the participant statements obtained through this research. Furthermore, the impact of the environment has been discussed in relation to any potential effects on depression and suicidal ideation. After all, if individuals find themselves powerless to influence daily life (Parnell, 2005), feelings of hopelessness are likely to emerge. This is likely to be particularly exacerbated by the splitting up of care into impersonal elements, possibly in effort by staff to keep human suffering at a distance, as well as an attempt to manage increasingly overstretched services (Age Concern England, 2008).

In general, it is hoped that the findings of this study have offered useful insights into some of the possible thoughts and likely psychological effects of considering a move away from independent living. It is also thought that this study has taken significant steps to further the investigation of prefactual and counterfactual thinking. Furthermore, this research has made direct, and seemingly unique, efforts to test a relatively new model of counterfactual generation (the TEMPO model). It has also highlighted the possible emotional impact of making a move towards residential care in older age. With regards to future research, this study

has considered the merits of continuing and extending the present study in order to gain further richness from these findings. It has also put forward a case for examining the potential impact of prefactual/counterfactual thinking on behaviour. Certainly, an important contribution of this work concerns its implications for clinical practice and the concerns it has raised regarding perceptions of care, dependency, and emotionality. It is hoped that such information can be used in both research and clinical settings in the future, and contribute to an improved understanding of the cognitive processes and influence of time in older age.

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U(H)

The psychological effects of considering a move into residential care:

An age-related study

INFORMATION SHEET

Introduction

You are being invited to take part in a research study to look at how people manage some of the big decisions, such as where to live, in later life. Before you decide whether you would like to take part in this research, please take the time to read the following information.

The researchers

The study is being carried out by Sarah Leggett, Trainee Clinical Psychologist, as part of a Doctoral qualification in Clinical Psychology at the University of Hertfordshire. The study is supervised by Mr Steve Davies (Deputy Programme Director and Consultant Clinical Psychologist), Dr Syd Hiskey (Chartered Clinical Psychologist), Dr James Erskine (Technical Consultant), and Drs Nick Wood and Joerg Shultz (Research Tutors).

What is the purpose of the study?

This research is looking at how people come to make certain decisions in later life, and how they might feel about such choices. As we get older, it is common for some of the more difficult life events, such as bereavement or poor health, to occur close to a need for decisions about where to live. Sometimes people might feel that they need more support in older age and so might consider a move to supported or residential housing. We know very little about how people feel about making these big decisions and also what impact they might have on mood or perceived quality of life. We also know very little about how regrets are managed in later years. This is an important area of investigation since it improves our understanding of how we might help older people with difficult moves. The research may also benefit the housing schemes involved by allowing us to develop information and support packages.

What is involved?

If you decide that you would like to take part, you will be asked to fill out seven single-page questionnaires in your own time that each look at different aspects of personality and mood. You will also be asked to read a short story about someone considering a move to residential care. From this story you will then write down what could be worse about this situation and what could be better. Some background information such as your age, gender, and whether you are considering such a move into supported housing will also be gathered. Having explained these materials to you in person, the researcher will leave you with the questionnaires and can either return to collect your completed forms at an agreed

date and time, or you can opt to post them back to her, depending on your preference.

Who is taking part?

This study will include males and females from three specific groups of people. The first group will be Undergraduate students, of working age, who are based at the University of Hertfordshire. The second group will be older adults (aged 65-years and over) who currently live in the community and who are not considering a move into supported housing. The third group will be older adults (aged 65-years and over) who are either considering a move into some form of supported housing or who are on a waiting list for such a scheme. In recruiting these three groups across the life span it is hoped that we might find out more about how decision-making and experiences of regret might change across our lifetimes. This study aims to recruit approximately ninety-nine people (thirty-three people in each group).

Do I have to take part?

No. If you do not want take part, or you change your mind *at any time* during your participation in this study, you can opt out without giving any reason. Participation is entirely voluntary and you can withdraw at any time.

What do I have to do?

If after reading this information sheet you would like to take part in the research, you will be given this sheet to keep and you will be asked to sign two copies of a consent form. You will be invited to keep one copy of the signed consent form and the researcher will keep the other copy. The researcher will then give you the small pack of questionnaires and the short story, as detailed above, and explain each of the forms to you. You will also be invited to raise any questions or concerns you may have about the forms. The questionnaire pack should take about an hour to complete. You are encouraged not to think too much about your answers but to go with what first comes to mind.

Will taking part be confidential?

Yes. If you do decide to take part, your answers will be anonymous. This means that the questionnaires will not have your name or contact details on them. Instead each questionnaire is given a number before it is given out to participants. Completed questionnaires will be confidential to the researchers and kept at a secure location, which will only be accessible by the researchers. To further ensure confidentiality, consent forms will be kept separately from the actual questionnaires. The overall findings of the project may be published in a research paper, but it will not be possible to identify individual participants.

What are the benefits of taking part?

Taking part in this study may not benefit you personally. However, it is hoped that this research will help us to assist older people with difficult moves and decisions in later life.

What if I have questions or concerns?

If you have any further questions about the research, please feel free to contact the researcher via email, telephone, or post, details of which are below. In the unlikely event that participating in this research causes you distress in some way, please do not hesitate to contact the researcher who will be able to advise you on where you might access further help.

Who has reviewed this study?

The study has been reviewed and approved by the University of Hertfordshire Psychology Ethics Committee. Registration Protocol Number: PSY/06/08/SA.

Thank you for taking time to read this.

Contact details of the researcher:

Sarah Leggett
Email address: S.J.E.Leggett@herts.ac.uk
Telephone number: 01707 286 322
Postal address: Doctor of Clinical Psychology Training Course
                              University of Hertfordshire, Hatfield, Hertfordshire, AL10 9AB

Appendix 2
<u>Checklist of forms</u>

<u>Forms for you to keep</u>

- ❑ The Information Sheet.

- ❑ 1 signed copy of the consent form.

<u>Forms for you to send back to the researcher</u>

- ❑ 1 signed copy of the consent form.

- ❑ The sheet entitled "A short story for you to consider" along with your completed response sheet.

- ❑ Your completed sheet entitled "Some background information about you".

- ❑ The seven (7) questionnaires you have completed, i.e.:

    - o The "Thought Control Questionnaire".
    - o The "White Bear Suppression Inventory".
    - o The "Self-Evaluation Questionnaire" (STAI Form).
    - o The "Life Orientation Test" (LOT-R).
    - o The "Marlowe-Crowne Social Desirability Scale".
    - o The "Rosenberg Self-Esteem Scale" (SES).
    - o The "General Health Questionnaire".

- ❑ The Debriefing Sheet if you would like to be sent the results of the study.

Forms can either be sent to the researcher, Sarah Leggett, by post or personal collection by the researcher can be arranged.

Thank you for your help with this study.

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CONSENT FORM

I ………………………………………………………………(please enter name)

give my full consent to take part in the following research investigation with the full understanding that I may withdraw at any time without giving any reason.

Title of Project: The psychological effects of considering a move into residential care: An age-related study.

Researcher: Sarah Leggett, Trainee Clinical Psychologist.

If I withdraw from the study, the data that I have submitted will also be withdrawn at my request. I understand that participation is voluntary and I am free to withdraw at any time, without giving any reason, without healthcare or legal rights being affected.

I have received an information sheet explaining what the research study entails and what will be expected from me.

I understand that the information that I will submit will be confidential, and used only for this study. I have read and understood the above information.

I agree to participate in the study.

Signed:

Date:

Researcher: _(signature)_ (Sarah Leggett)

Appendix 4

Prefactual Scenario

A short story for you to consider…

Joan and William are both 75. They do not know each other, but both are considering their future housing situations. Both Joan and William have lived in the same area for most of their lives and both have family who live a couple of hours' drive away. Both Joan and William are now widowed and both are beginning to experience some health and mobility problems. Joan and William each agonise over the decision to leave their much loved home of many years; going back and forth between thinking they will stay and thinking the time has come to sell-up and leave. They ultimately make different decisions. Joan decides that she would like to find some form of supported housing that allows her to live nearer her family. She can retain some of her independence but carers are always present on site. William decides that he would prefer to remain in his much loved home, with his own space, and so continues to manage independently as best he can.

Some months later, suppose that ill health begins to get the better of both Joan and William. In terms of their housing arrangements, there will be a rapid need for some form of permanent residential care in the very near future. No longer will they be able to manage alone in their own home.

Questions for you to consider (response sheet provided over the page):

1. a. Who will feel better about their impending situation?

    b. Why?

2. a. What could be better about Joan's situation?

    b. What could be worse about Joan's situation?

3. a. What could be better about William's situation?

    b. What could be worse about William's situation?

<u>Story Response Sheet</u>

1) a. Who will feel better about their impending situation?

1) b. Why?

2) a. What could be better about Joan's situation?

2) b. What could be worse about Joan's situation?

3) a. What could be better about William's situation?

3) b. What could be worse about William's situation?

Appendix 5
Some background information about you

1. Are you: ■ Male   ■ Female

2. How old are you?…………….. years

3. With whom do you live with at home?

   ■ Spouse   ■ Friend(s)
   ■ Son/Daughter   ■ Carer(s)
   ■ Live alone   ■ Other, please
   specify……………………..

4. How would you describe your living arrangements?

   ■ Live in own home (mortgage or no mortgage).
   ■ Private rented accommodation.
   ■ Council housing.
   ■ Live with family.
   ■ Sheltered housing scheme.
   ■ Residential/Care home.
   ■ Other, please
   specify…………………………………………………………..………

5. Are you considering a move within the next year?

   ■ Yes   ■ No **(if no proceed to end)**

6. Will this move be to private accommodation or are you planning to enter a residential or supported housing scheme, e.g. sheltered housing?

   ■ Private move.
   ■ Move to supported/sheltered housing scheme.
   ■ Move to residential care.
   ■ Other, please specify………………………………………………………….

7. How did you come to make this decision?

   ■ Entirely free choice.
   ■ Choice influenced by health/mobility/bereavement, for example.
   ■ Other, please specify………………………………………………………

8. What could be better about your situation?

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9. What could be worse about your situation?

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<u>END</u>
Thank you very much for your time.

Appendix 6

THOUGHT CONTROL QUESTIONNAIRE (TCQ)

Most people experience unpleasant and/or unwanted thoughts (in verbal and/or picture form). Which can be difficult to control. We are interested in the techniques that you *generally* use to control such thoughts.

Below are a number of things that people do to control these thoughts. Please read each statement carefully, and indicate how often you use each technique by *circling* the appropriate number. There are no right or wrong answers. Do not spend too much time thinking about each one.

When I experience an unpleasant / unwanted thought:

		Never	Sometimes	Often	Almost always
1	I call to mind positive images instead	1	2	3	4
2	I tell myself not to be so stupid	1	2	3	4
3	I focus on the thought	1	2	3	4
4	I replace the thought with a more trivial bad thought	1	2	3	4
5	I don't talk about the thought to anyone	1	2	3	4
6	I punish myself for thinking the thought	1	2	3	4
7	I dwell on other worries	1	2	3	4
8	I keep the thought to myself	1	2	3	4
9	I occupy myself with work instead	1	2	3	4
10	I challenge the thought's validity	1	2	3	4
11	I get angry at myself for having the thought	1	2	3	4
12	I avoid discussing the thought	1	2	3	4
13	I shout at myself for having the thought	1	2	3	4
14	I analyse the thought rationally	1	2	3	4
15	I slap or pinch myself to stop the thought	1	2	3	4
16	I think pleasant thoughts instead	1	2	3	4
17	I find out how my friends deal with these thoughts	1	2	3	4
18	I worry about more minor things instead	1	2	3	4
19	I do something that I enjoy	1	2	3	4
20	I try to reinterpret the thought	1	2	3	4
21	I think about something else	1	2	3	4
22	I think more about the more minor problems I have	1	2	3	4
23	I try a different way of thinking about it	1	2	3	4
24	I think about past worries instead	1	2	3	4
25	I ask my friends if they have similar thoughts	1	2	3	4
26	I focus on different negative thoughts	1	2	3	4
27	I question the reasons for having the thought	1	2	3	4
28	I tell myself that something bad will happen if I think the thought	1	2	3	4
29	I talk to a friend about the thought	1	2	3	4
30	I keep myself busy	1	2	3	4

Appendix 7

White Bear Suppression Inventory (WBSI)

This survey is about thoughts. There are no right or wrong answers, so please respond honestly to each of the items below. Be sure to answer every item by circling the appropriate letter beside each.

A	B	C	D	E
Strongly Disagree	Disagree	Neutral or Don't Know	Agree	Strongly Agree

A B C D E   1. There are things I prefer not to think about.

A B C D E   2. Sometimes I wonder why I have the thoughts I do.

A B C D E   3. I have thoughts that I cannot stop.

A B C D E   4. There are images that come to mind that I cannot erase.

A B C D E   5. My thoughts frequently return to one idea.

A B C D E   6. I wish I could stop thinking of certain things.

A B C D E   7. Sometimes my mind races so fast I wish I could stop it.

A B C D E   8. I always try to put problems out of mind.

A B C D E   9. There are thoughts that keep jumping into my head.

A B C D E   10. There are things that I try not to think about.

A B C D E   11. Sometimes I really wish I could stop thinking.

A B C D E   12. I often do things to distract myself from my thoughts.

A B C D E   13. I have thoughts that I try to avoid.

A B C D E   14. There are many thoughts that I have that I don't tell anyone.

A B C D E   15. Sometimes I stay busy just to keep thoughts from intruding on my mind.

Appendix 8

Spielberger Trait Anxiety Inventory

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	①	②	③	④
22. I tire quickly	①	②	③	④
23. I feel like crying	①	②	③	④
24. I wish I could be as happy as others seem to be	①	②	③	④
25. I am losing out on things because I can't make up my mind soon enough	①	②	③	④
26. I feel rested	①	②	③	④
27. I am "calm, cool, and collected"	①	②	③	④
28. I feel that difficulties are piling up so that I cannot overcome them	①	②	③	④
29. I worry too much over something that really doesn't matter	①	②	③	④
30. I am happy	①	②	③	④
31. I am inclined to take things hard	①	②	③	④
32. I lack self-confidence	①	②	③	④
33. I feel secure	①	②	③	④
34. I try to avoid facing a crisis or difficulty	①	②	③	④
35. I feel blue	①	②	③	④
36. I am content	①	②	③	④
37. Some unimportant thought runs through my mind and bothers me	①	②	③	④
38. I take disappointments so keenly that I can't put them out of my mind	①	②	③	④
39. I am a steady person	①	②	③	④
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	①	②	③	④

Appendix 9

LIFE ORIENTATION TEST (LOT-R)

Instrument Number: 2 1 7
(For internal use only)

ID Number: [ ][ ][ ]

Study ID: 1 0 3

Date: [ ][ ] / [ ][ ] / [ ][ ]
(month)   (day)   (year)

INSTRUCTIONS: Please answer the following questions about yourself by indicating the extent of your agreement using the following scale:

[0] = Strongly Disagree
[1] = Disagree
[2] = Neutral
[3] = Agree
[4] = Strongly Agree

Be as honest as you can throughout, and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers. Fill in one circle for each question. Do not skip any questions.

Shade circles like this: ●
Not like this: ⊗ ✓

	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
1. In uncertain times, I usually expect the best.	O	O	O	O	O
2. It is easy for me to relax.	O	O	O	O	O
3. If something can go wrong for me, it will.	O	O	O	O	O
4. I am always optimistic about my future.	O	O	O	O	O
5. I enjoy my friends a lot.	O	O	O	O	O
6. It is important for me to keep busy.	O	O	O	O	O
7. I hardly ever expect things to go my way.	O	O	O	O	O
8. I do not get upset too easily.	O	O	O	O	O
9. I rarely count on good things happening to me.	O	O	O	O	O
10. Overall, I expect more good things to happen to me than bad.	O	O	O	O	O

Appendix 10

THE MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE (MC)

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is *true* (T) or *false* (F) as it relates to you personally.

1. Before voting I thoroughly investigate the qualifications of all the candidates. **T** / **F**	
2. I never hesitate to go out of my way to help someone in trouble. **T** / **F**	
3. It is sometimes hard for me to go on with my work if I am not encouraged.**T** / **F**	
4. I have never intensely disliked anyone. **T** / **F**	
5. On occasion I have had doubts about my ability to succeed in life. **T** / **F**	
6. I sometimes feel resentful when I don't get my way.**T** / **F**	
7. I am always careful about my manner of dress. **T** / **F**	
8. My table manners at home are as good as when I eat out in a restaurant. **T** / **F**	
9. If I could get into a movie without paying and be sure I was not seen I would probably do it. **T** / **F**	
10. On a few occasions, I have given up doing something because I thought too little of my ability. **T** / **F**	
11. I like to gossip at times. **T** / **F**	
12. There have been times when I felt like rebelling against people in authority even though I knew they were right. **T** / **F**	
13. No matter who I'm talking to, I'm always a good listener. **T** / **F**	
14. I can remember "playing sick" to get out of something. **T** / **F**	
15. There have been occasions when I took advantage of someone. **T** / **F**	
16. I'm always willing to admit it when I make a mistake. **T** / **F**	
17. I always try to practice what I preach. **T** / **F**	
18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people. **T** / **F**	
19. I sometimes try to get even rather than forgive and forget. **T** / **F**	
20. When I don't know something I don't at all mind admitting it. **T** / **F**	
21. I am always courteous, even to people who are disagreeable. **T** / **F**	
22. At times I have really insisted on having things my own way. **T** / **F**	
23. There have been occasions when I felt like smashing things. **T** / **F**	
24. I would never think of letting someone else be punished for my wrongdoings. **T** / **F**	
25. I never resent being asked to return a favour. **T** / **F**	
26. I have never been irked when people expressed ideas very different from my own. **T** / **F**	
27. I never make a long trip without checking the safety of my car. **T** / **F**	
28. There have been times when I was quite jealous of the good fortune of others. **T** / **F**	
29. I have almost never felt the urge to tell someone off. **T** / **F**	
30. I am sometimes irritated by people who ask favours of me.**T** / **F**	
31. I have never felt that I was punished without cause.**T** / **F**	
32. I sometimes think when people have a misfortune they only got what they deserved. **T** / **F**	
33. I have never deliberately said something that hurt someone's feelings. **T** / **F**	

<u>Rosenberg Self-Esteem Scale (SES)</u>

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

GENERAL HEALTH QUESTIONNAIRE

GHQ-12

Please read this carefully:

We should like to know if you have had any medical complaints, and how your health has been in general, *over the past few weeks*. Please answer ALL the questions simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those you had in the past. It is important that you try to answer ALL the questions.

Thank you very much for your co-operation.

HAVE YOU RECENTLY:

1 — been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2 — lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3 — felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4 — felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5 — felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
6 — felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
7 — been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
8 — been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
9 — been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10 — been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11 — been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12 — been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

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understanding potential

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U**H**

The psychological effects of considering a move into residential care:

An age-related study

Debriefing sheet

Thank you very much for making this study possible!

This study is investigating how people make some of the big decisions in life, for example, where to live. As we get older, it is common for some of the bigger and more difficult life events, such as poor health or loss of a partner, to coincide with big decisions over our living arrangements.

So far, we know very little about how people make these choices in later years. We also know very little about how they manage any regrets in older age and what impact this might have on their emotional state and quality of life.

This study is aiming to find out how we might help with transitions into supported housing. We are also looking to discover if there are any predictors of increased regret experiences, for example, certain personality traits. Information such as this would help us to improve support to those in this position, as well as helping to support the families that might also be involved.

It is also hoped that this study might help us to develop information and support packages that might add to the current understanding and resources of the housing schemes involved.

If you need to talk about this further, or if you have recently experienced problems with your mood, please call the researcher on **01707 286 322** OR access the following support:

Samaritans
Telephone: 08457 90 90 90
Website: http://www.samaritans.org/

Would you like to know the results of this study?

If so, please write your name together with *either* your email address or postal address in the space below, and the results will be sent to you when the project is completed
……………………………………………………………………………………………

Thank you for taking part in this study.

Sarah Leggett
Trainee Clinical Psychologist
University of Hertfordshire

Appendix 14

School of Psychology Ethics Committee Approval

SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL

Student Investigator: Sarah Adams

Title of project: The psychological effects of considering a move into residential care: An age-related study

Supervisor: Steve Davies

Registration Protocol Number: PSY/06/08/SA

The approval for the above research project was granted on 9 June 2008 by the Psychology Ethics Committee under delegated authority from the Ethics Committee of the University of Hertfordshire.

Signed: *Kvavilaw*   **Date:** 9 June 2008

Dr. Lia Kvavilashvili

Chair

Psychology Ethics Committee

STATEMENT OF THE SUPERVISOR:

From my discussions with the above student, as far as I can ascertain, she has followed the ethics protocol approved for this project.

Signed (supervisor): ....

Date: 2.7.09

Appendix 15

Table 13: Age group comparisons on numbers of acquisitive and aversive
statements generated.

	Work-age (N=33) Mean (SD)	Older adult (N=33) Mean (SD)	t-value	p value 1-Tailed	Effect Size
Acquisitive Statements	2.33 (1.339)	2.48 (1.302)	-0.466	0.322	0.12
Aversive Statements	3.09 (1.308)	3.91 (2.283)	-1.787	0.040	0.45*

Note: *p<0.05

Appendix 16

Table 14: Matrix of Pearson's r Correlations between types of Prefactual Simulations

	Joan Upward Prefactuals	Joan Downward Prefactuals	William Upward Prefactuals	William Downward Prefactuals	Total Character Upward Prefactuals	Total Character Downward Prefactuals	Total Character Prefactuals
Joan Upward Prefactuals		-0.178 (0.154)	0.348 (0.004)*	0.272 (0.027)*	0.848 (0.000)*	0.064 (0.610)	0.633 (0.000)*
Joan Downward Prefactuals			-0.137 (0.273)	0.454 (0.000)*	-0.193 (0.120)	0.842 (0.000)*	0.522 (0.000)*
William Upward Prefactuals				-0.203 (0.102)	0.792 (0.000)*	-0.201 (0.106)	0.388 (0.001)*
William Downward Prefactuals					0.062 (0.621)	0.863 (0.000)*	0.714 (0.000)*
Total Character Upward Prefactuals						-0.072 (0.567)	0.631 (0.000)*
Total Character Downward Prefactuals							0.728 (0.000)*
Total Character Prefactuals							

Note: *$p<0.05$ (2-tailed)