

Lost in Transition: The impact of identity on psychological wellbeing during periods of significant life change

Ву

Shannon DeSilva

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Lost in Transition: The impact of identity on psychological well-being during periods of significant life change

Shannon DeSilva BPsyc (Hons)

Flinders University

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Summary

Life transitions are a core part of the human experience. The ease or difficulty of these periods can have long-term consequences for our life satisfaction, our well-being, and our engagement with our new identity. Consequently, there is a need to better understand the nature of transitions, and the factors that make one individual more vulnerable than another to psychological decline. Our present understanding of transitions, and the factors that determine how detrimental they will be, come from a variety of disciplines including social psychology, health, business, and anthropology. There are parallels within these transition perspectives, both in how they explain the core features of a transition experience, and in the factors theorised to cause psychological distress.

In this thesis I draw on parallels across these theories of transitions and integrate them with our understanding of social identity change to provide a novel means of identifying individuals at risk of psychological decline. The proposition developed throughout this thesis is that an individual's vulnerability during a transition can be captured through their perception that they have 'lost' their past and/or future sense of self. This idea is inspired by the concept of liminality which first appeared in the anthropological work of van Gennep (1960), which suggests that during a transition an individual is 'liminal' as they exist between who they were and who they will be. The conception of liminality has been expanded upon and now appears in a wide variety of transition related contexts, such as workplaces, healthcare, and bullying. In this thesis, the perceived loss of connection to one's past and future is operationalised as a *subjective loss of self* (SLS).

In this thesis *subjective loss of self* captures the perception that the individual feels disconnected from their past or future selves. I evaluate SLS with respect to core features of

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transitions, such as social isolation and group membership changes to explore the pathways by which an individual maintains well-being throughout a transition. Consequently this thesis suggests and explores pathways between the Social Identity Model of Identity Change (SIMIC) and SLS, which provides a more complete picture of how a transition affects an individual. Finally, I look at transitions involving grief to better understand how individuals adjust to a transition after losing an important part of their self-concept and look at whether this loss can precipitate an unending and continually debilitating transition.

Overall, the findings suggest that *subjective loss of self* provides a means to understand how an individual is coping with a transition, to a degree that is separate and in addition to their group membership changes. Additionally, it provides a proximal measure of transition vulnerability which could allow for earlier identification of those at risk of having a difficult transition experience. This thesis highlights the value in understanding and capturing an individuals' perception of themselves whilst within the transition and emphasises the importance of social psychology to positive life transition outcomes.

Declaration

I certify that this thesis:

- Does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university
- and the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and
- to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Additionally, I confirm that I received an Australian Government Research Training Program Scholarship to support completion of this thesis.

Shannon DeSilva

December 2021

Acknowledgements

It is strange writing a thesis about transitions, when you yourself are in one – even if you aren't fully aware of it at the time. Indeed, this thesis represents a transition in itself – the progression from a novice researcher, to one who still feels a little like a novice but can now see what could have been done differently. What I would not change however, is the incredible group of people who have helped me throughout this journey – and are particularly important to this document existing at all.

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Lost in Transition: The Impact of Loss of Self on Well-being Through Life Transitions

Chapter 1

Lost in Transition: The Impact of Loss of Self on Well-being Through Life Transitions

"I can't go back to yesterday, because I was a different person then."

(Carroll, 1865)

After her adventures in Wonderland, Alice finds that her experiences have changed her so completely that what happened to her in the past is of no relevance to the individual she has become. Indeed, a deeper reading of the quote suggests that the individual she was 'yesterday' was so different from who she is, that they could almost be seen as two distinct individuals. While often not as clear cut as an adventure in Wonderland, each of us have experienced significant changes in our lives as we move from one situation, role, circumstance, or state of mind to another. As occurred for Alice in Wonderland, the more significant of these changes may lead to such a comprehensive re-evaluation of our sense of self that we struggle to relate to even those who were previously closest to us. These changes are termed transitions as they involve a clear break with the life one held (Brammer, 1992). Thus, a change is a clear and defined shift from the previous normality, while a transition is a process of adaption that occurs when a change is of sufficient magnitude (Bridges, 1986). For example, a change could be the closing down of a restaurant you frequent, or the moment you find out you have lost your job. While both situations involve change, the latter is far more likely to lead to a life transition. The loss of a job may cause a period of uncertainty where the individual feels lost and needs to make sense of who they are in their new reality. Therefore, a transition is a far more involved process where there is a need to adjust to the *change event* to regain stability in their sense of self (Halliday, 2012). As a result, transitions can come in many forms. Changing careers or retiring; ending a relationship, or getting married; leaving, or beginning

university; are all relatively common experiences that have the potential to be a transition. Consequently, it can be said that all transitions begin with a change, but not all changes will result in transition. Indeed, it would be better to say that changes are in themselves an 'ending' as from this moment the individual loses part of their previous status quo and must adapt to their new reality. Hence, a significant change leaves the individual in an uncertain, transitional space between who they were, and who they will be (Banmen, 2002; Bridges, 1986; Greco & Stenner, 2017; Thomassen, 2009).

Within this thesis, a small selection of transitions are examined. It is noted that this does not capture a comprehensive overview of all types of transition, nor all experiences. The transition to university, within the workplace and out of a significant relationship are the types of transitions covered in this thesis. They differ in terms of the characteristics of the participants that are experiencing them, as well as in the degree to which they impact the lives of the individuals. The study does not cover many other types of life transition, such as moving to a new city, having a child, being diagnosed with a life-long or life-threatening condition, or starting a new relationship amongst a multitude of other possibilities for transitions. The wide variety of transitions within society does limit the generalisability of this thesis. However, the differences between the transitions discussed, such as their normality, impact on social groups, length, acknowledgement by superiors, supports available and subjective importance of the sense of self that was disrupted, means that this does provide a valuable resource in understanding how people cope with and move through transitions.

The purpose of this thesis is to examine how these changes to one's sense of self impact on well-being during transition. Well-being represents a core component of our overall health, and can be measured in terms of physical, mental, and social

characteristics. Further, well-being also includes positive expressions of our physical, mental, or social states, and is not limited to the absence of a diagnosed condition or illness (World Health Organisation, 2002). In a life transition the disruption to an individual's identity creates uncertainty and stress which is detrimental to well-being (Miller, 2010). Additionally, aspects of well-being such as relationships and occupational status can also be negatively impacted by transitions. And yet transitions are duplicitous. They can be exciting, anticipated events that lead to growth, as well as uncertain or even feared events that can negatively impact on well-being (Hettich, 2010). For example, a transition like commencing university, can for one individual be an exciting and life-affirming choice, while another experiences significant psychological distress and drops out. This provokes the question as to what makes the difference, why are transitions periods of growth and development for some, and challenge the well-being of others?

One perspective on transitions is that the key determinant of well-being outcomes is not the transition itself but becoming lost in transition – stuck between their past and future selves (Szakolczai, 2017; Thomassen, 2009). This period of transition is variably referred to as a liminal period (Thomassen, 2009; Van Gennep, 1960), neutral zone or wilderness (Bridges, 1986), or chaos phase (Sayles, 2002). It is in this period that the individual is thought to experience declines in psychological well-being. One of the suggested reasons for why an individual can exist between their past and future selves within a transition, is that the change event causes them to lose access to part of who they were before the transition. Within this thesis, the loss of self that occurs due to the transition is examined through an understanding of social identity change (Jetten & Pachana, 2012). The loss of group memberships due to a transition leading to the loss of associated social identities and with them, the positive effect on how the individual conceives themselves. Indeed, the loss of a core social

identity may underpin whether the individual can move through this as a minor 'change' in their lives or moves through a difficult life transition. If this is the case, then it is important to be able to identify when a person may be becoming 'stuck' in the transition. In doing so we can support people to approach life transitions in a way that attenuates psychological decline.

In this thesis I will examine social and identity related factors that may lead to a lost sense of self during transitions. The experience of losing connection to one's identity and becoming stuck or lost in transition (and the implications for well-being) are impacted by multiple complex factors. Changes to one's social group memberships and associated social identities have been identified as key factors that impact on well-being (Iyer et al., 2009; Steffens, Jetten, et al., 2016). Research suggests that the number of pre-transition group memberships, as well as the social identities that are maintained or gained across the transition have positive health outcomes (Iyer et al., 2009; Jetten et al., 2012). Further, these social factors are known to impact on well-being (Greenaway et al., 2016; C. Haslam et al., 2008). Researchers have also observed that feeling confusion around one's identity predicts poorer health outcomes and an increase in symptom severity (Papa & Lancaster, 2016). In addition, a loss of group memberships can precipitate a decline in strength of self-concept (Slotter et al., 2015). Specifically, loss of group membership is suggested to take with it the social identity it supported, and thus impair an individual's sense of self. These shifts in one's identity, particularly one's social identity, are suggested to precipitate declines in well-being.

Consequently, I propose that changes to identity during periods of transition will relate to well-being, via a *loss of a subjective sense of self*. That is, that the impact of social identity change on well-being will be of most significance when it results in *a subjective loss of self* (SLS). I argue that while there are many social identity

dynamics that can have an impact on well-being during transition, it is the degree to which these changes or challenges are interpreted as a *subjective loss of self* that is most associated with risk for psychological decline. As such, I will construct a measure of *subjective loss of self* and examine how this relates to well-being outcomes such as feelings of social isolation, or a reduction in self-efficacy. In addition, there is debate in the literature as to whether all losses of self are problematic; indeed some have argued that letting go of one's past self can be supportive of, or even essential, to transition (Bridges, 1986; Jetten & Pachana, 2012; Szakolczai, 2017). In this thesis I will show that perceiving a loss of a self is not unidimensional, and that it can be broken into two components: a subjective loss of past identity and a subjective loss of future identity. A subjective loss of past representing the individual's perception that they are connected to their previous self, while a subjective loss of future representing that the individual feels detached from their sense of who they would be in the future. The studies included will test the relationship between these dual dimensions and well-being during transitions.

External factors that are also related to well-being, such as group membership or social identity dynamics (and factors that are often moderated by other factors), can be complicated to assess in situ, making it difficult to identify who may be at risk of experiencing declines in well-being. Consequently, if I can measure how the loss of group memberships, impacts on one's sense of self due to the loss of social identity, we can examine the impact of losing a group, without the difficulty of capturing the characteristics of the groups themselves. Thus, if I can capture *subjective loss of self* which I argue mediates the relationship between group membership loss and psychological well-being then we may be able to (1) more easily identify those in need of support, and (2) conduct research to better understand the dynamics that impact on becoming 'lost in transition'. In addition, I can explore whether the

subjective perception we hold of ourselves during a transition has a meaningful relationship to health outcomes. In the remainder of this chapter, I will review the extant literature on transitions and how they can lead to declines in well-being in some individuals, but not others.

It is well established that our group memberships (and their linked social identities) are intrinsic to our sense of self. Previous research has demonstrated that having multiple group memberships and maintaining these (and gaining new groups) across the transition supports well-being (C. Haslam et al., 2008; C. Haslam, Cruwys, Milne, et al., 2016; Iyer et al., 2009). Thus, I argue that changes to group memberships will contribute to a *subjective loss of self* that provides an indication of how an individual is coping with a transition. Finally, I will provide an overview of the experience of being 'lost in transition' to delineate the link between not knowing oneself and the individual experiences of psychological decline that are an oft noted component of life transitions.

What is a transition?

Throughout our lives we all move through periods of change that all have the potential to be life transitions, whether it be commencing (or completing) a PhD, adjusting to the diagnosis of a major illness, changing jobs, or changes in relationships. What differentiates a transition from a mere change is that it necessitates a significant period of adjustment to the new environment or life circumstance (Gall et al., 2000). Fundamentally the transition alters the previous status quo, which prevents the individual from perceiving themselves in the same way in which they previously had (Sayles, 2002). This leaves the individual in a transitional phase: a period between who one was and who one will become. This can be referred to as a liminal period (Thomassen, 2009; V. Turner, 1969), neutral zone or the wilderness (Bridges, 1986) or chaos phase (Sayles, 2002) amongst other terms. In

order to move through the transition, the individual must work through this change in their lives, until they are able to regain control and establish a new stable identity.

Transitions impact on well-being often – but not always

Within a transition, it is acknowledged that there is a risk of an impact on an individual's well-being as they come to terms with this change in their lives (Bewick et al., 2010; Bridges, 1986). Fundamentally, the impact on an individual's well-being during a transition is thought to come from the loss of clarity and certainty in one's identity – leaving them unable to easily define themselves. The importance of knowing who you are to one's mental health is well-established. For example, Charmaz (1983) found that individuals who had lost connection to their pre-illness selves were more isolated, had little belief in themselves, feared burdening others and were withdrawn from society. In a transition, one's connection to a particular group membership is challenged or lost to the change event, creating a vulnerability to psychological decline.

. Indeed, even when the transition is desired and will bring increased freedom than the routine of regular daily life, there is also an increased risk of experiencing anxiety, depression, and a perception of being socially isolated (Chick & Meleis, 1986; Jetten et al., 2002; Little et al., 1998). For example, researchers have found that the transition to university is associated with mental health declines that is in addition to that explained by demographic characteristics (Stallman, 2010). Further, university students were found to have high levels of anxiety and low levels of general wellbeing and resilience compared to the general population (van Agteren et al., 2019). Bewick and colleagues (2010) also found that a decline in psychological well-being occurs during the transition to university and their well-being remains lower than their pre-university levels for the remainder of undergraduate study. A similar pattern is found in retirees, while many maintain a good level of well-being, between 10 and

25% experiencing declines in psychological well-being (Steffens, Cruwys, et al., 2016). Even beginning a career can place the individual at risk, as Maheen and Milner (2019) note that there can be a significant drop (but remaining positive) in life satisfaction when young people became employed.

However, the degree to which this affects an individual is variable, as the same transition can impact the identity of individuals differently. For example, Rossen and Knafl (2007) noted that the relocation of older women from living alone to independent living in a community led to an improvement in their quality of life. Similarly, Spielman and Taubman-Ben-Ari (2009) found parents whose children were premature experienced greater personal growth than those who reached full-term. Indeed, even for the transition to university, there is evidence that some students thrive and experience a net improvement in their well-being despite the decline in well-being of many of their peers (Richardson et al., 2012).

A variety of factors and circumstances may determine if an individual is likely to experience a decline or improvement in their functioning across a life transition. These include (but are not limited to) the number of their social connections, their social class (Iyer et al., 2009), their sense of purpose (Lizzio & Wilson, 2010), individual differences in personality (E. Johnson & Nozick, 2011; Lu, 1994) and coping strategies (Jones & Johnston, 1997). More recently however, there has been substantial research that finds that an individual's well-being after a transition is largely shaped by gains and losses in social group membership and the social identities that inform the self-concept (C. Haslam et al., 2008; Jetten et al., 2008).

Within this thesis the focus is on the impact of losing social identities on the difficulty or ease of a transition experience. This is for several reasons, primarily that social identity can include a large number of the variables above due to the social group informing who the individual is, and the supports available to them (Onorato &

Turner, 2004). Additionally, there is increasing research suggesting that our social identification has a meaningful role to play in terms of our psychological well-being (Jetten et al., 2012) and in developing a stable sense of identity following a transition (Bentley et al., 2019). Other factors, such as personality, coping strategies and sense of purpose are accounted for by the size of the sample included in the present studies but not specifically examined due to being outside the scope of the thesis.

Understanding how the self-concept impacts on well-being

The self-concept itself has been the subject of significant research over the years – from the early works of Plato to William James and now to a modern conception as a multi-faceted and fluid construct. Social psychologists theorise that the self-concept is made up of both our social identity and personal identity, allowing us to conceive ourselves differently depending on the situation (Rosenberg & Kaplan, 1982). This conception of the self-concept builds upon self-categorisation theory (Turner, 1985) which suggests that personal identity is based on the categorisations of oneself as an individual in contrast to other individuals, whereas the social identity component of our self-concept is based on context-dependent categorizations of oneself as a member of a group in contrast to other groups.

The way in which we see ourselves, as well as the groups that we categorise ourselves as being a part of inform our overall sense of self (Onorato & Turner, 2004). Thus, personal identity and the salience of our self-categorisations within particular groups are a resource for well-being as they provide the individual with an understanding of themselves and their environment. Greenaway and colleagues (2016) examined the benefit of social identities on well-being. They found that gaining new social identities predicted a feeling that their needs for belonging, control, and self-esteem had been met whilst a loss of group memberships decreased need satisfaction in these areas. Similarly, Cruwys and colleagues (2014) examined

depression treatment and noted that increased social identification with a community group predicted a reduction in their level of depression symptoms as well as increased engagement in treatment.

As a result, our social identities are increasingly being recognised as predictors of well-being and of the likelihood of a response to treatment for mental illness. Indeed, lack of social connectedness has been identified as a risk factor for mortality and mental illness (Jetten et al., 2012). Beckwith et al. (2019) demonstrate how individuals recovering from addiction benefit from the development of a shared recovery identity, as it decreased use of substances in the future. Similarly, Cruwys and colleagues' (2014) review highlights the role social identities and relationships play in the incidence and treatment of clinical depression. Amongst other benefits, the review notes that gaining social connectedness contributes to a reduction of depressive symptoms, whilst a higher number of social identities is associated with a lower likelihood of developing depression symptoms. Together, these and other researchers demonstrate the importance of social identities to well-being, providing a base from which to understand the declines associated with their loss.

Transitions lead to changes in social identity and group memberships

A large portion of our self-concept is informed by our social group memberships (Tajfel & Turner, 1979; Turner, 1985). Our group memberships then help to inform our own sense of who we are, as the more we identify with a particular group, the more it informs the way we see ourselves and can influence our behaviours. Potentially, transitions are so difficult because the loss of group membership(s) means that we lose part of who we are (Jetten & Pachana, 2012). When an individual experiences a transition, their sense of self is impacted by the loss of group memberships that previously informed their self-concept, as well as by the loss of social support that was linked to the group memberships (Jetten et al.,

2012). Specifically, social identities provide an individual with part of how they see themselves, the groups they feel comfortable in, their values, their beliefs, as well as relationships and practical support (S. A. Haslam, 2017). Therefore, the loss of social groups reduces the individual's capacity to make sense of themselves and their world. Unsurprisingly, the loss of social identities during a transition is associated with lower life satisfaction (C. Haslam et al., 2008), an increase in unmet psychological needs (Greenaway et al., 2016), and an increased risk of mortality (Steffens, Cruwys, et al., 2016). During this time, the individual seeks to regain a sense of clarity around their self-concept by seeking out new group memberships and maintaining the ones that remain (S. A. Haslam, 2017). If the individual is unable or unwilling to engage with new groups and thus gain new social identities, the individual may find themselves 'stuck' between who they were in the past and who they will become, short on psychological resources provided by social groups and identities.

Understanding how a shift in social identities impacts on well-being

This process by which changes in social identity impact on well-being is best captured by the Social Identity Model of Identity Change (SIMIC) (Iyer et al., 2009; Jetten & Pachana, 2012). Central to the model is the argument that a gain or loss of group memberships across the transition, moderated by the compatibility of these group memberships, causes a change in well-being. Transitions involving more important identities are suggested to have a greater impact on the individual as the identity is more difficult to let go of (Epstein, 1973; Jetten & Pachana, 2012). Practically, as clinicians, researchers, or professionals, it can be difficult to quantify these details, such as the salience of 'when' a group is gained or lost, and the centrality of the group membership(s) lost. Thus, an assessment of the risk of psychological decline during a transition requires a comprehensive assessment of an individual's particular group memberships, including the importance of each to their

identity both before and early in the transition, as well as how the connection to each group membership changes over time, and how each interacts with new emerging identities (which also need to be assessed). While SIMIC informs our understanding of how transitions might impact on well-being, this presents a complexity that can make SIMIC difficult to apply, because of the number of potential moderators and the difficulty of assessing those dimensions.

Current strategies to assess this shifting of identities involves examining group membership changes (C. Haslam et al., 2008), mapping a person's social network (Cruwys et al., 2016), or looking at how similar they feel to who they were (Secrest & Zeller, 2003) or will be (Ersner-Hershfield et al., 2009). For example, to address the issue of capturing the vast array of moderators and complexities of group membership change, Cruwy's and colleagues (2016) developed the Social Identity Mapping (SIM) tool. The tool provides an overview of an individual's social groups, as well as their degree of compatibility and importance. Use of the tool has already demonstrated that SIMIC provides a good representation of how group memberships predict well-being for individuals recovering from drug addiction (Beckwith et al., 2019). While the tool provides numerous benefits in terms of clinical applications and research, it does require time and effort in the construction of the social map, and its interpretation limiting the contexts in which this may be practical or easily scalable. Similarly, the current (and only validated) measure of present-future self-continuity focuses on the degree to which an individual feels they are the same as the person they are going to be in the future (Ersner-Hershfield et al., 2009). The measure involves the individual selecting overlapping circles that indicate the degree of similarity between them and their future-self ten years later. This scale has also been applied to measure the individuals similarity to who they were 10 years beforehand (Rutt & Lóckenhoff, 2016). While this provides useful information in terms of self-consistency, self-

consistency may not be the best indicator of a risk of decline during transitions. Indeed, feelings of inconsistency may necessarily go hand in hand with the transition experience, as an individual may not have a clear sense of what their future will look like, but they may expect and be comfortable with the idea of change. Seeing the transition as a journey of personal growth would then not be captured by a selfconsistency measure.

Each of these methodologies provide a basis for understanding how changes to identity can affect well-being, but do not specifically capture whether someone may be at risk of psychological decline, or if they do, such inferences require substantial time, effort, and interpretation. The complexity associated with assessing group memberships directly does present an opportunity. Specifically, if we were to consider that it is not necessarily the loss of the group membership itself that leads to the psychological decline, but rather it is the degree that this loss of social groups leads to the individual perceiving that they have 'lost' part of their sense of self, then we can assess that sense of subjective 'lostness'. The degree to which the individual experiences a decline in well-being during the transition. Consequently, the development of a new measure of identity during transitions that can capture *subjective loss of self* may provide an alternative means of ascertaining the risks to well-being during a transition.

Loss of a subjective sense of self as a more proximal indicator of well-being risk through transition.

Transitions begin with disruption to one's identity - with a change that represents an 'ending' of who one used to be (Banmen, 2002; Bridges, 1986; Greco & Stenner, 2017; Thomassen, 2009). This ending creates a need for the individual to seek out a new identity to supplant that which was disrupted. The loss of self which

necessarily accompanies a transition event provides the individual with both freedom and uncertainty, as the individual can explore pathways previously blocked, but will also suffer from not having a clear sense of who they are (Beech, 2011; Greco & Stenner, 2017; Stenner et al., 2017). Uncertainty around their identity appears to be a core feature of a transition, and is suggested to be necessary to a successful transition (Bridges, 1986; Sayles, 2002). However, researchers also warn that the longer an individual spends in this period, the greater the risk to their well-being (Firnhaber et al., 2019; Schweiger & DeNisi, 1991; Thomassen, 2009). The inability to overcome this loss of self by establishing a new identity is thought to cause individuals' to become stuck in the transition and risk significant declines in their psychological well-being (Szakolczai, 2017).

Qualitative researchers and transition theorists suggest that the greater the loss of identity that occurs, the more likely the individual is to experience psychological decline (Bridges, 1986; Greco & Stenner, 2017). This idea is supported by the literature, as the strength of one's identity has been shown to be closely associated to their well-being. For example Ethier and Deaux (1994) examined the experience of Hispanic students during their first year at predominately Caucasian universities. They found that those who strengthened their ethnic identity and links to their culture developed greater self-esteem than those who were more weakly identified with their culture. Similarly Little et al. (1998) examined the transition of patients suffering a chronic illness or being diagnosed with cancer and found that his patients often experience a loss of meaning in their lives that leads to disorientation, isolation and uncertainty that persists indefinitely. Thus, I hypothesise that transitions that result in disruptions to the sense of self, particularly causing a *loss of self*, will be associated with declines in well-being.

Changing group memberships or social identities and their impact on one's past self.

As transitions can impact on gains and losses in social group membership and the social identities, they can lead to the loss of a sense of self. In the 2017 blockbuster film Star Wars: The Last Jedi (Johnson & Williams, 2017), the conflicted character of Kylo Ren argues "*Let the past die. Kill it, if you have to. That's the only way to become what you are meant to be*" which is an approach mirrored in much transition theory – that an individual must let go of who they used to be in order to move forward. However, there is disagreement in transition literature about whether this is the appropriate response. Many researchers argue that the individual should let go of who they were immediately, in order to embrace a potential future (Bridges, 1986; Fiol, 2002; Jetten & Pachana, 2012; Szakolczai, 2017), whilst others see a strong connection to one's past identity as essential to a successful transition (Chick & Meleis, 1986; Schumacher & Meleis, 1994). By measuring how a transition effects an individual's self-concept, I aim to explore this question more closely, and in doing so determine when an individual's past self may buffer against the psychological decline associated with the transition, and when it may instead increase its difficulty.

If an individual is unable to maintain their pre-transition identity it is argued that they must give it up, as otherwise it will impair their ability to build a new identity (Jetten & Pachana, 2012). Bridges (1986) amongst others (Kofoed & Stenner, 2017; Szakolczai, 2017) present the argument that an individual needs to formally acknowledge that who they were is no longer available to them, and that their previous self is 'dead'. Indeed in Bridges' (1986) overview of workplace transitions he suggests that the main cause of resignation and stress were a failure by the employee to let go of the identity they held prior to the merger, or a failure by others to acknowledge the significance of the 'death' of this identity. Dismissing the

significance of the transition was thought to lead to a decline in well-being as employees would feel that their distress was unimportant. Similarly, an inability to let go of who they were contributed to an unwillingness to engage with their new environment or role. Other theorists also argue that a failure to let go of one's past exacerbates psychological decline, by preventing them from completing the transition (Stenner et al., 2017; Szakolczai, 2017). These authors, as well as other liminal theorists (Beech, 2011; Garsten, 1999; Thomassen, 2009), suggest that letting go of this past identity, means they are more able to explore potential future pathways and group memberships, as they are not bound by what previously defined them.

The alternative possibility is that an individual does not need to let go of their pre-transition identity and that it can mitigate some of the challenges of the transition. While the disruption of one's past is destabilizing, the inability to interact with a group membership does not mean that the associated identity is immediately lost. For example, Praharso and colleagues (2017) found that it was not an individual's ability to interact with the group membership that had been disrupted that mattered, rather it was the connection they felt to that identity. Similarly Oswald and Clark (2003) found that individuals who maintained even a low level connection to their hometown friends after moving away for college, had lower levels of social isolation irrespective of their proximity or interactions with this group membership. There is also recognition that individuals who are diagnosed with a significant illness are often unprepared for the changes that are to come to their life, and lack the resources and knowledge to cope with the change (Chick & Meleis, 1986; Schumacher & Meleis, 1994). Consequently a connection to who one was (such as a healthy pre-illness identity) is essential as it is necessary to integrate features of who they were into who they are becoming (Meleis & Trangenstein, 1994). Finally, while a failure to let go of a past identity is seen as detrimental to gaining new group memberships (Jetten et al.,

2002), the idea of maintaining as many group memberships as possible is also seen as essential to well-being (C. Haslam et al., 2008). Additionally, there is a question as to how essential it is for the individual to accept the loss of their past sense of self that has been disrupted by the transition. Do these previous group memberships and associated identities lead to a slower transition and hence to declines in well-being, or does an individuals' connection to this identity potentially support their well-being and increase their likelihood of gaining new group memberships?

Jetten and Pachana (2012) note that an individual experiences greater difficulty in a transition if they are unable to let go of the pre-transition identity. Jetten et al. (2002) found that individuals in a workplace who had a strong connection to their pre-restructure team had the most difficulty adjusting to the new team structure and had lower job satisfaction. Maintaining connection to a disrupted identity is also suggested to interfere with the individuals' ability to gain new group memberships, which is a means to reduce the impact of losing another social group (Jetten & Pachana, 2012). Steffens et al. (2016) found support for this argument noting that individuals who had gained group memberships after retirement were more satisfied and had better health than those who did not gain group memberships. Similarly, Iyer and Jetten (2011) also show that nostalgia (a positive perception of one's past) is only beneficial to well-being if the individual also has a high level of identity continuity, measured through continued engagement with pre-transition groups. Haslam and colleagues (2014) extend this idea further through examining how reminiscence can improve life satisfaction and cognitive outcomes in older adults. They found that when an individual identified with the type of reminiscence used (secular song, religious song, or story), their cognitive or well-being outcomes improved. Thus, maintaining connection to one's past is suggested to interfere with the transition. When an individual is able to maintain connection to the groups that were previously

connected to them, they are less likely to experience a life transition, and more easily adjust to the change. Overall, this suggests that an individual experiencing a transition should let go of their sense of who they were as otherwise their previous group memberships will increase the difficulty of the transition.

Maintaining continuity of self: Keeping one's past sense of self is a benefit

However, there is an alternate perspective that suggests that maintenance of one's pre-transition identity, even when this identity is lost to them, may be beneficial to well-being. Specifically, it is suggested that holding onto one's sense of identity despite a loss of group membership may buffer against decline by allowing them to find meaning from the disruption to their lives (Purves & Suto, 2004). This idea sits at the heart of self-continuity, which suggests past and the present are intertwined, and that an individual's ability to reflect on what led them to their present identity is necessary for a complete sense of self (Bluck & Alea, 2008; Wiggins, 2001). In a transition, self-continuity is disrupted as the individual perceives a break between who they are, were (past self) and will be (future self). Self-continuity research finds that the ability to perceive continuity in identity is associated with better overall wellbeing and a lower incidence of mental illness (Sani et al., 2008). However, selfcontinuity often considers one's future or possible selves as more important than their connection to their past and does not capture an individual's perception of themselves. Consequently there is significant research suggesting that seeing alignment between one's values and beliefs in the present with who they will be in the future predicts better saving behaviour (Ersner-Hershfield et al., 2009), increased exercise (Rutchick et al., 2018) and incentives for future action (Markus & Nurius, 1986). Further, selfcontinuity research focuses on the specific values and attitudes the individual expects to hold in the future and looks for an alignment to their present self. While this is

generally apt, I believe that within a transition this may misalign – as an individual may anticipate or even desire change in their future self.

Continuity of one's past is suggested to be central to our ability to reminisce over past experiences and to perceive ourselves as the same individual throughout time (Bluck & Alea, 2008). Whilst continuity with the past has been focused on less than future self-continuity, there has been some exploration of the past as an aid to adjustment in a new environment. Timotijevic and Breakwell (2000) interviewed migrants from former Yugoslavia and found that an ability to maintain cultural continuity helped them to maintain self-efficacy and self-esteem. Similarly, Chandler and Lalonde (1998) found that young First Nations people who live in communities that have sought to rehabilitate their culture and language had a far lower rate of suicide. However, Iyer and Jetten (2011) have also found that positively reflecting on one's past is only beneficial if the individual also maintains connection to their preuniversity social groups. Therefore, while continuity with the past, or with one's culture does provide a buffer against psychological decline, it is not a clear-cut benefit. Additionally, none of the above studies measured whether it was possible to maintain a connection to their past self during a transition, nor how a loss of continuity could impact on their self-concept. The present research provides an opportunity to explore how a breakdown of self-continuity due to the transition affects the individual's perception of their own identity. In doing so, it provides a means to capture how perceived losses or gains in one's sense of their past and future relate to, and can be a marker of, psychological vulnerability during a transition.

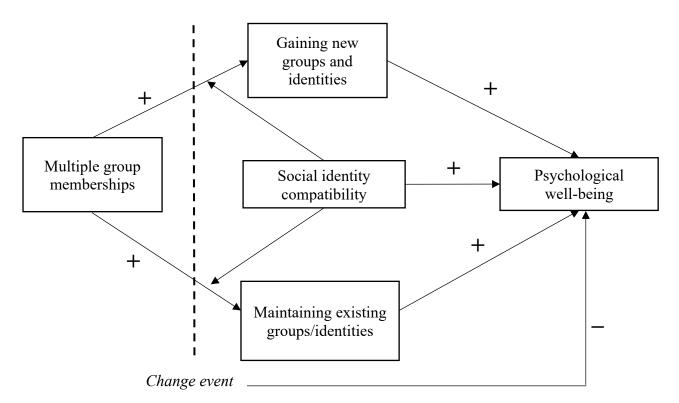
An additional benefit of this research is that it sheds light on the utility of maintaining one's past self, as a connection to one's past (disrupted) identity is variably seen as a detriment to well-being (Bridges, 1986; Greco & Stenner, 2017; Szakolczai, 2009), a temporary buffer against decline (Ellemers, 2003), and as

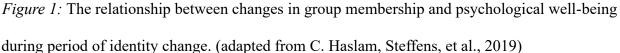
necessary to the successful completion of the transition (Chick & Meleis, 1986; Sadeh & Karniol, 2012). This link is clouded in social identity research, where maintaining continuity of one's social identities is beneficial (C. Haslam et al., 2008), and yet letting go of who one was prior to the transition is important for the individual to open themselves up to gaining new group memberships (Jetten & Pachana, 2012). In this thesis I will explore how changes in one's subjective past and future self relate to declines or gains in well-being during transitions.

Gaining and maintaining group memberships, as well as future identity continuity predict better future well-being.

While the question of how the past relates to one's well-being during a transition is uncertain, there is a great deal of research demonstrating that future self-continuity, goal directed behaviour, positive expectations and visions of one's future are associated with better health outcomes. Lizzio and Wilson (2004) found that students commencing university had better well-being when they developed a clear sense of connection between their present identity, their tasks, and their idea of their future. Further, individuals with greater clarity around who they will be in the future are found to have higher levels of positive traits and optimism, and lower anxiety than those with an unclear perception of their future (McElwee & Huagh, 2008). The caveat to research that involves the future is an inherent bias towards individuals who already have good mental health, as MacLeod and Conway (2007) show individuals with a poorer mental health already have a decreased ability to imagine positive things happening for them. Regardless, the theme of research on future identity is a general

association with positive outcomes and better well-being than for individuals with an uncertain future.

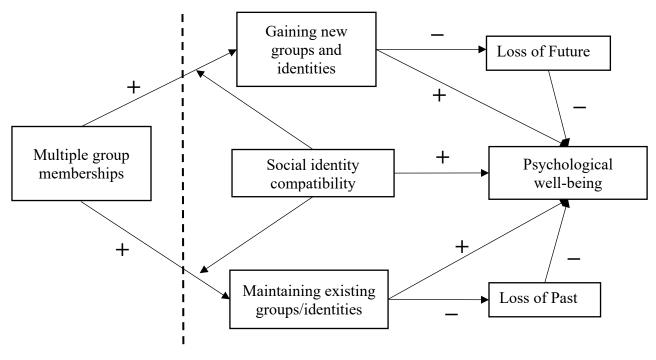




Group membership changes, which are intimately linked to the strength of an individual's self-concept, also impact on their well-being. Consequently, it is not surprising that gaining new group memberships or maintaining a connection to other social groups is beneficial. C. Haslam et al. (2008) found that people who had suffered a stroke had better well-being afterwards if they were able to maintain connections to their pre-transition group memberships. Other researchers support this claim, showing that the maintenance of social groups is beneficial to well-being and to a sense of self-continuity (Greenaway et al., 2015; K. Miller et al., 2016; Sani, 2008; Sani et al., 2015). Similarly, the higher the compatibility between the individuals pre and post transition group memberships, the less likely the individual is to experience a break in their identity (Iyer et al., 2009). Iyer and colleagues (2009)

also demonstrated that the more social groups an individual was a part of prior to the transition the more likely they were to maintain some of these identities. Overall, the research is clear that gaining new group memberships is beneficial to the individual through both increasing their perception of support and social connection, as well as supporting their sense of self. Thus, there are two pathways by which an individual maintains their well-being during a transition, by gaining new groups, and maintaining group memberships as shown in Figure 1, adapted from C. Haslam, Steffens, et al., (2019). In turn, each of these pathways are influenced by the number of group memberships the individual held before the transition, as well as the compatibility between these group memberships and their new environment (Iyer et al., 2009).

Our group memberships and social identities help to inform our sense of self. Above, I have demonstrated that group membership gain, as well as a positive perception of one's future are both predictive of better psychological well-being during periods of transition. Similarly, continuity in one's sense of past self should be linked to the maintenance of previous group memberships, and in turn predict their overall well-being. As a result, we can look at whether an individual perceives a loss of who they were or will be as a means of capturing the degree to which they are coping with the transition. Individuals who are coping poorly are expected to perceive a loss of their past and future identities, that is consequent to the maintenance and gain of group memberships as seen in Figure 2.



Change event

Figure 2: Composite model indicating the predicted relationship between the SIMIC model and the subjective loss of self factors

I also aim to explore how an individual copes with the uncertainty of the transition, through measuring the relationship between identity and typical features of a life transition. This component of the thesis will also serve as an indicator of whether a subjective loss of self has a meaningful impact on psychological well-being as well as the key indicators of decline, social isolation, and self-efficacy. As shown in Figure 3, I expect that an individual who perceives a loss of their past and future identity will have a lower level of psychological well-being, as their sense of who they are is clouded. These effects are expected to be mediated by increased social isolation and declines in self-efficacy. Strength of past is expected to be closely related to social isolation given it should be linked to the connections that are

maintained during the transition. Strength of future should predict well-being directly as it is related to positive goal directed outcomes, as well as feeling competent and connected to their new role. Should these arguments be supported, *subjective loss of past and future self* will be an indicator of whether an individual is vulnerable to experiencing psychological decline during a transition. Further, this mechanism will provide a means to capture changes in one's perceived loss or gain of past and future identity more easily than using alternative measures.

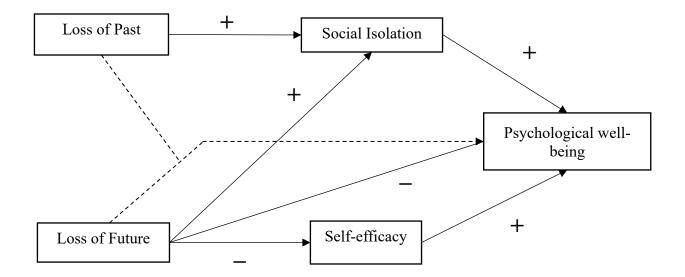


Figure 3: Predicted relationship between the subjective loss of self factors and the transition specific outcome variables. The dashed line indicates the predicted interaction.

The types of well-being domains likely to be impacted by loss of self

The impact of losing one's sense of self on well-being is suggested to particularly impact on motivation and social isolation. Indeed, the self-concept functions motivationally – it guides and directs behaviour by providing us with relevant norms as well as determining what we believe ourselves to be capable of achieving (Berkman et al., 2017). Thus, the loss of a meaningful group membership that previously informed behaviour and their sense of self could lead the individual to feeling ineffectual or lost in their new environment. Bridges (1986) argued that the loss of a job role during a merger can reduce the individual's ability to understand their environment as well as themselves, contributing to a decline of belief in their ability. Fiol (2002) similarly argues that during periods of transition, a loss of identification with their role contributes to decreased motivation and work ethic until they establish a new identity. Indeed, it is suggested that an individual 'completes' a transition when they are able to mitigate the impact of the loss of identity on their self-concept and gain a sense of autonomy over their environment (Hart & Swenty, 2016; Meleis & Trangenstein, 1994).

Similarly, a disruption of the self-concept can lead to increased feelings of social isolation. The perception of being isolated is recognised across most transition literature, with Chick and Meleis (1986) arguing that a sense of disconnection is the most "pervasive characteristic of transition" (p.240). As an example of this, Little et al. (1998) noted that individuals diagnosed with cancer restricted themselves from their community, due to a sense that no one would understand what was going on for them. Indeed, these behaviours highlight how the perception that no one could understand, leads to physical withdrawal, further increasing their risk of social isolation. Futhermore, most transitions involve the loss of group memberships which informed their identity, increasing the likelihood that an individual will feel isolated and alone in their experience of the transition.

While we understand that these shifts in our social identities can impact on our well-being during a transition, at present it is difficult to determine which specific individual will experience psychological decline. Individuals who experience a decline in well-being during life transitions are more likely to develop mental health conditions or drop out (Stallman, 2008), resign from their position (Bridges, 1986), or have poor adjustment to their new role (Lam et al., 2018) amongst other negative

outcomes. In this thesis I will examine how a transition creates uncertainty around an individual's subjective sense of self, as the individual experiences a shift in their group memberships that previously informed their sense of self. I aim to show that measuring an individual's *subjective loss of past and future selves* can provide an analogue and simple means of capturing this change and predict outcomes for their psychological well-being. In this thesis I will develop a measure of a subjective loss of self in order to determine the extent of destabilization of the self-concept. By capturing this destabilization, we can test (1) how specific individual, social, and situational determinants impact on destabilization to the subjective sense of self, and (2) how destabilization to the sense of self impacts on well-being through transition. In turn, we can develop better approaches to identify when a person may be 'lost in transition', helping us to understand their experience and the risks of the period.

Summary and Overview

The present thesis investigates whether an individual's perception of their selfconcept following a transition event provides meaningful information that can then be used to support them to stabilise their transition identity through gaining positive group memberships. It is expected that individuals passing through a transition will experience a *Subjective Loss of Self* (SLS), whereby they feel less connected to who they were in the past (loss of past self) and/or who they will be in the future (loss of future self). Individuals who perceive a subjective loss of both facets of their identity are expected to have poorer well-being and transition outcomes. An individual is expected to perceive a loss of self when they lose connection to the group memberships (social identities) that they previously held (loss of past self), or if they are unable to forge new connections following the transition (loss of future self). Consequently, it is anticipated that the SLS measures will be related to the group membership variables within the Social Identity Model of Identity Change (SIMIC),

whereby group membership gains are related to the strength of one's future self, whilst those that are maintained through the transition strengthen one's past self.

In Chapter 2, the *Subjective Loss of Self* (SLS) scale is proposed as a means of determining the degree to which an individual feels connected to who they were before the transition, and who they will become. The two studies look at the relationship between the SLS variables and various transition related outcome variables, as well as with markers of group membership change. In addition, the two studies in Chapter 2 also allow for the testing of the prediction that maintaining a connection to one's past self is not detrimental to the individual's path through the transition.

Chapter 3 finalises the scale development portion of the thesis, arriving at a final version of the SLS scale, by applying the measure to workplace transitions. The study aims to show that the SLS scale is not linked to a specific form of transition and can provide useful information to employers seeking to reduce the impact of a merger or restructure on their employee's well-being.

The two studies included in Chapter 4 are longitudinal, providing a means to look at how one's perception of themselves changes over time, and whether this is related to their psychological well-being. Of central interest is whether losing or maintaining a past identity becomes detrimental over the medium term, by preventing the individual from embracing their post transition environment. The two studies also look at whether the SLS scale can be used as an indicator of when an individual appears to be managing the transition well, and when they may require additional support.

The final study chapter in the present thesis takes a different approach to the previous chapters, by looking at the long-term consequences of losing a partner to divorce or bereavement. The study aims to quantify the existence of a 'liminal

hotspot' which is where individuals who have lost both their past and future selves exist in an indefinite transition associated with poorer well-being and increased social isolation. Additionally, the study looks at whether the importance group memberships lost during the transition are meaningful, when they are consequential to losing one of the most central identities an individual held.

Finally, Chapter 6 provides an analysis of the findings in the context of social identity theory and looks ahead to how this research furthers our understanding of transitions and their impact on psychological well-being.

Chapter 2

Understanding how group membership loss impacts on the self-concept during a significant life transition

Life transitions are an undeniable feature of life within any human society, ranging from tribal rituals and debutante balls to more informal shifts such as losing a job or beginning university. But the impact of a transition varies markedly, some individuals are largely unaffected, whilst others experience significant psychological distress, or even growth. In Chapter 1 I argued that a change event leads to a transition that is particularly difficult when it leads to a *subjective loss of self* (SLS). The degree to which an individual perceives this loss of connection to who they were, and who they will be, may then provide insight into a person's risk of psychological decline. An individual's subjective loss of self is thought to occur because of shifts in group memberships that occur when an individual experiences a life transition. This chapter tests the idea that a *subjective loss of self* is a consequence of changes in one's social identities and thus represents a proximal indicator of psychological well-being during periods of transition. A subjective loss of self is not likely unidimensional but bidimensional, representing a loss of who they were prior to the transition, and a loss of what they perceive as their future. The studies in this Chapter explore the nature of these dimensions of identity and examine their relationship to well-being. The present research aims to construct a measure of these two facets of one's subjective sense of self, which may also be useful as a proximal measure of well-being during periods of transition. This allows further exploration of how a subjective loss of self impacts on well-being, and whether it occurs through a loss of self-efficacy and social connectedness as predicted by the transition literature. A loss of future self is hypothesised to have a negative influence on the transition, whilst the research varies significantly on the impact of losing of one's past sense of self. Further, it allows me

to test whether changes in group memberships that occur during a transition can be adequately accounted for by measurement of one's past and future sense of self.

Understanding the impact of a life transition on identity

It is well established that periods of transition are linked to declines in wellbeing (DeGarmo & Kitson, 1996; Epstein, 1973; Oyserman & James, 2011). Indeed, we know that this decline can occur even for transitions that were sought after, such as beginning university (Bewick et al., 2010; Stallman, 2010), becoming a parent (Spielman & Taubman-Ben-Ari, 2009), or changing careers (Hamid-Balma, 2016). Irrespective of the cause, transition events disrupt the self-concept through removing an individual's access to the social identities that sit within it. Consequently, the individual enters a period of identity reconstruction where they seek stability in their sense of self through gaining new group memberships or reconnecting with previous ones. When the lost social group was distal to the individual this can be quite straightforward, but when the lost group was central to their identity it can have a profound impact on one's life and well-being.

In understanding the process by which this occurs, I draw on the Social Identity Approach (S. A. Haslam, 2017; S. A. Haslam et al., 2009), comprising the theories of Self-categorisation (Oakes & Turner, 1980; Turner, 1985; Willer et al., 1989) and Social Identity (Tajfel & Turner, 1979). According to the social identity approach, our self-concept includes both personal and social identities, where our social identities are comprised of our memberships in social groups with which we identify. Indeed, a premise of the approach is that we can define and understand ourselves through our social identities and our personal identity. Further, an individual's ability to perceive themselves as a member of a particular social group, also informs their behaviours and self-concept (Cruwys, Haslam, Dingle, Haslam, et al., 2014). The authors also note that the ability to see oneself as a member of a social

group also varies significantly across time, as our available social identities are consequent to what is occurring in the world around us. Consequently, a change in group memberships affects an individual's sense of identity and means that all transitions have the potential to be debilitating, whether they were desired or not (Jetten & Pachana, 2012).

The Social Identity Model of Identity Change (SIMIC) suggests that changes to social group memberships during transitions are key predictors of well-being outcomes. SIMIC suggests that when an individual experiences a change event, their ability to maintain connection to the group memberships they were a part of beforehand, and their ability to gain group memberships in the new environment, are the key methods by which they can mitigate risk to their well-being. As shown in Figure 4, the protective benefits of each of these pathways is suggested to be enhanced by the number of pre-transition group memberships held, and the compatibility between their old and new group memberships. Essentially, an individual is expected to cope well with the transition if they are able to maintain a

number of pre-transition group memberships, and gain compatible new social groups,

as this will mitigate the impact of group membership loss on their self-concept.

A subjective loss of self as a proximal indicator of well-being

The central features that allow us to understand the significance of a particular life transition are looking at the importance, compatibility, level of social contact, and alignment of the individual with their group membership (Cruwys et al., 2016). The

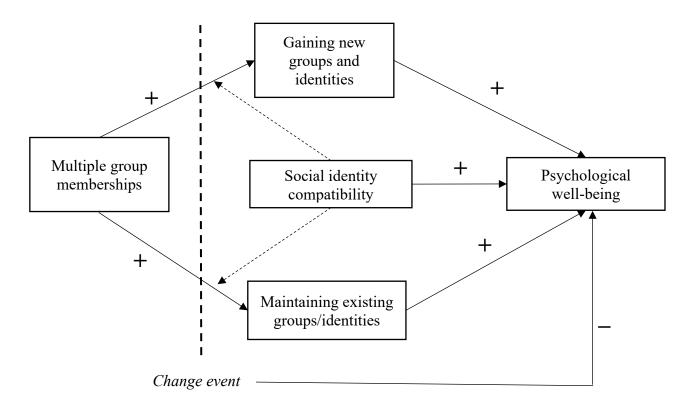


Figure 4: The relationship between changes in group membership and psychological wellbeing during period of identity change. (adapted from C. Haslam, Steffens, et al., 2019)

complexity of measuring the various components of group membership recently led to the development of a comprehensive Social Identity Mapping (SIM) tool, which aims to capture an individual's entire social network for use in planning future interventions (Cruwys et al., 2016). The tool has demonstrated efficacy as it was able to show that individuals in a rehabilitation program who had gained group memberships that did not normatively use drugs or alcohol had a stronger

identification with the recovery from addiction identity (Beckwith et al., 2019). However, the need to map and interpret the network necessitates time and effort on both the participant and experimenter that limits its capacity to be scaled to larger populations. Consequently, I argue that it may be more efficient to create a measure that can capture the impact of these group membership changes by looking at how the individual sees themselves. (C. Haslam, Cruwys, S. A. Haslam, et al., 2016; C. Haslam, Cruwys, et al., 2019; Jetten et al., 2012).

The core theme of transitional periods across business (Bridges, 1986; Fiol, 2002), healthcare (Chick & Meleis, 1986; Meleis & Trangenstein, 1994), interpersonal relationships (Banmen, 2002), grief and loss (Papa & Lancaster, 2016), and liminal theory (Greco & Stenner, 2017; Thomassen, 2009), is that the individual feels a sense of disconnection from who they were before the transition, and feels uncertain about their future. These themes are central to the conception of subjective loss of self which I suggest results from changes in group membership that occurred during the transition. Within transition literature, the sense of loss is variably named liminal, wilderness, neutral zone or chaos period amongst others (Bridges, 1986; Sayles, 2002; Stenner et al., 2017). This sense of loss is articulated as uncertainty around their identity (who they are and who they will be) and leads to a decline in their self-belief and a perception that they are alone in their experience (Bridges, 1986; Greco & Stenner, 2017; Little et al., 1998; Schumacher & Meleis, 1994). In turn, these factors contribute to a decline in an individual's overall psychological wellbeing and to the development of psychopathology (Isaac et al., 2018; van Agteren et al., 2019). The creation of a measure that captures the degree to which an individual's subjective sense of self has been altered by the transition may be beneficial, to the extent that subjective loss of self provides a more proximal indicator of well-being during a transition than the changes in group memberships themselves. Consequently,

the present study will measure both group membership changes and *subjective loss of self* to determine whether it has utility as a predictor for well-being decline.

Understanding the subjective perception of loss

By definition, a transition involves an individual moving from one stable state to another through a period of instability and uncertainty (Sayles, 2002). In order to capture when an individual is between one's past and future. I draw upon the idea that within the transition the individual exists between their past and their future (Greco & Stenner, 2017; Thomassen, 2009). Therefore, subjective loss of self is not unidimensional but instead can independently impact on one's sense of past or future selves. Thus, subjective loss of self can be best captured by breaking it into past and future components to capture the various possible outcomes of a transition. These past and future selves relate to the individual's ability to perceive themselves as connected to who they were in the past, and who they are planning to be in the future. In a transition, an individual may feel as if their 'planned' future self has been lost to them due to the transition itself, or barriers that have arisen since. In this situation, I argue that they would be more vulnerable to psychological decline as they are unable to regain the social identities required to have a stable sense of self. At this stage, it is unclear whether remaining connected to one's past increases the difficulty in achieving their planned future, of if it supports them in reaching it. Similarly, if one loses their past self, they are entirely reliant on achieving their 'future' as they no longer have a stable base of social connections on which to fall back on when encountering barriers or adversity. Given the number of possible transitions, it is feasible that an individual could perceive a loss of their past self, whilst having a strong sense of their future, or vice versa. Further, it may be that the loss of one is of greater importance than another, or that the importance of one's future or past varies depending on what instigated the transition. There is also the potential that the past

can anchor down some individuals, preventing the exploration required to achieve their planned future, whilst driving others towards theirs. This model also allows further exploration of why some individuals experience very significant declines in well-being, whilst others are barely affected. It could be that the individual experiencing the decline has perceived a loss of both their past and future selves. The loss of past and future self-concepts should have a distinct impact on well-being that is independent of each other, and a measurable pathway to psychological well-being.

The impact of a subjective loss of past self is an unclear picture in the transition literature – it is variably seen as either essential or detrimental to the transition. In literature from the field of nursing, the connection to the past is important as it provides the individual with an anchor to the life they previously held which reduces the likelihood of developing an 'invalid' identity that persists beyond recovery (Chick & Meleis, 1986). Indeed, it is not essential that the individual be practically connected to their previous group membership for them to receive some benefit. Praharso, Tear and Cruwys (2017) show that perceiving that they are a member of a group is beneficial even if they are no longer able to interact with the group. Van Leeuwen, Van Knippenberg and Ellemers (2003) found that individuals who maintained their pre-merger group identity through the transition were better placed to identify with the post-merger group, despite the pre-merger group membership being lost to them. Thus, it may be beneficial to have individuals reflect on their past connections and sense of self during a transition, in order to support their sense of self. However, this perspective is contrasted by the argument that maintaining a connection to the identity disrupted by the transition interferes with gaining new group memberships and thus increases the difficulty of the transition.

In contrast to the idea of the past as a buffer, Jetten and Pachana (2012) argue that moving on from this disrupted identity is difficult yet essential, as it will

otherwise prevent the individual from engaging with their future. This argument is supported by findings that show the more important the identity is to the individual (Jetten et al., 2002), or the more reluctant the individual is take on new identities (C. Haslam et al., 2008), the lower the likelihood of the individual accepting the need to let go of who they were. Iyer and Jetten (2011) found that nostalgia for the past was only beneficial for those who had high identity continuity, suggesting that reflecting on one's past when these groups have been lost may be detrimental. This idea is also espoused in other transition literature, with Bridge's (1986) arguing that an individual whose position changed during a merger but cannot let go of their pre-transition identity will be more vulnerable to rejecting the transition and may even resign from their position. Similarly, in liminal theory, the loss of one's past that occurs in a transition is likened to a death of who one used to be, and a failure to appreciate the finality of this loss is linked to a lengthier and more difficult transition (Greco & Stenner, 2017; Szakolczai, 2017). Overall, this presents a question as to the role of the past self and whether it varies across different types and valence of transitions.

This presents a question for the present study in determining the role of a *subjective loss of past* in how an individual copes with and moves through a transition. The research discussed above indicates that the past has shown variable benefit to individuals within a transition event. Potentially, the past can have a variable effect, based on the number of groups lost, or the type of transition that occurred. However, as an individual in a transitional phase is most at risk when they are between their past and future selves, I argue that one's sense of past self will have a positive association psychological with well-being.

While the role of the past is unclear, a *subjective loss of future* is uniformly negative, as a strong future identity is seen as important to successfully navigating a transitional period (Bridges, 1986). Rutchick et al., (2018) found that those who felt

more similar to their future self also had better subjective well-being. Similarly, in SIMIC, a gain of group memberships over the transition had a beneficial effect as it makes up for the disruption to one's sense of self by providing new social identities. These identities can provide social support as well as the sense that the individual belongs in the new environment (Iyer et al., 2009; Jetten & Pachana, 2012). In other transition literature, nursing theorists suggest that assisting a patient to accept and strengthen a positive future identity is an essential feature of recovery (Chick & Meleis, 1986). Similarly, Bridge's (1986) sees the individual's seeking out and exploring of potential futures as the key benefit of transitional phases. Specifically, he argues that the instability of the transitional period means that the individual is free to embrace a new role or identity without being tied to who they were. Therefore, individuals who experience a *subjective loss of future self* are more likely to experience significant declines in their overall psychological well-being.

The two dimensions of subjective loss are thus linked to an individual's wellbeing during periods of transition. The impact of losing one's past identity however remains uncertain as to whether it is advantageous or detrimental to the individual. In the present study I argue that an individual who feels disconnected from their sense of past identity will also perceive themselves as more isolated from those around them. Whilst Bridges (1986) argues that holding onto the past is detrimental, he also notes that when managers fail to appreciate the significance of the transition that this can lead to overall poorer outcomes. Similarly, Little et al. (1998) noted that after diagnosis cancer patients would increasingly isolate themselves, due to the selfperception that no one could understand what they were experiencing and weren't worth engaging with. Within nursing literature, Chick & Meleis, (1986) argue that the sense of isolation created by going to hospital is one of the most pervasive characteristics of a transition. Of course, much of the presented evidence is specific to

individual's suffering from a significant illness, it remains to be seen whether these patterns hold for transitions of different types and valence. In this thesis, it is argued that the theme of disconnection that the transition brings with it in its disruption of the status quo will mean that individuals who feel they are no longer connected to their past self will also perceive themselves as socially isolated.

Another core feature of transitions is that the loss of clarity around one's future identity alters the individual's belief in their own ability. The transition event necessarily alters an individual's sense of identity, and when this causes a loss or weakening of their perception of their future it is suggested to decrease self-belief and motivation. Fiol (2002) found that transitions led to heightened self-consciousness and suspiciousness of their colleagues – increasing pressure to perform whilst decreasing output. Similarly, patients entering the healthcare system often feel as if they lack autonomy and control over themselves and their treatment (Little et al., 1998; Schumacher & Meleis, 1994). This often led to the patient disengaging from having an active role in their care and becoming dependent on their key workers. In addition, those who lose a sense of their future are more likely to adopt an 'ill' identity that remains well after the individual has left the healthcare system (Chick & Meleis, 1986). Therefore, individuals who experience a *subjective loss of future self* should have lower self-efficacy and overall well-being than those who are able to maintain connection to their future.

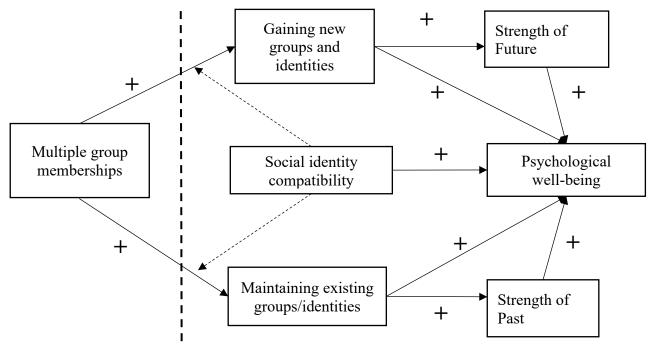
Constructing a composite model of transitions

As proximal indicators of well-being during periods of transition, a *subjective loss of self* should demonstrate a relationship to the established markers of a transition – changes in our group memberships. From SIMIC we know that the loss of group memberships leads to poorer well-being outcomes. Steffens et al. (2016) found that for retirees who lost group memberships had an increased risk of death and lower life

satisfaction compared to non-retiring matched controls. Similarly Slotter et al. (2015) found that having participants sourced from Amazon Mechanical Turk (MTurk) imagine that an important group membership was under threat of being lost caused a reduction in self-concept and self-esteem. The loss of a group membership appears to have a uniformly negative relationship to one's overall well-being. I argue that individuals who lose important group memberships, are also experiencing a loss of their past self. Consequently, individuals who lose connection to their group memberships should also have a weaker past self, which leads to lower psychological well-being than those who maintain a strong connection.

Gaining group memberships is generally linked to positive effects on an individual's health and well-being, as it provides another resource by which an individual can define themselves by. For example, Steffens and colleagues (2016) found people who gained group memberships after retirement had greater life satisfaction and were in better health than those who maintained or lost group memberships. Similarly, Cruwys et al. (2013) found that for people diagnosed with depression, gaining one group membership reduced their risk of relapse by 24%, whilst gaining 3 groups decreased the risk by 63%. Gaining a new group membership thus supports an individual to establish their sense of self in the new environment (Iyer et al., 2009; Jetten & Pachana, 2012). I predict that individuals who gain group memberships will not experience a *subjective loss of future self* as this has been supported by their new social identities. Therefore, having a strong sense of one's future self should be associated with gains in group memberships and psychological well-being.

In turn, this argument allows the construction of a model whereby the strength of an individual's future identity is predicted by group membership gain, and strength of past identity by group membership maintenance (or loss) during periods of transition. I have represented this model in Figure 5.



Change event

Figure 5: Composite model indicating the predicted relationship between the SIMIC model and the subjective loss of self factors

In terms of specific domains of well-being, I hypothesise that a *subjective loss of past or future self* will be associated with greater social isolation, whilst a loss of future will also be related to lower self-efficacy and psychological well-being. For ease of interpretation, the components of the scale are 'strength of past self' and 'strength of future self', whereby a high score indicates connection to this component of themselves, whilst a low score indicates a *subjective loss of self*. These are represented in Figure 6. I have also predicted an interaction whereby an individual

who has experienced a loss of future self but has a strong past self will not experience

as significant declines in psychological well-being.

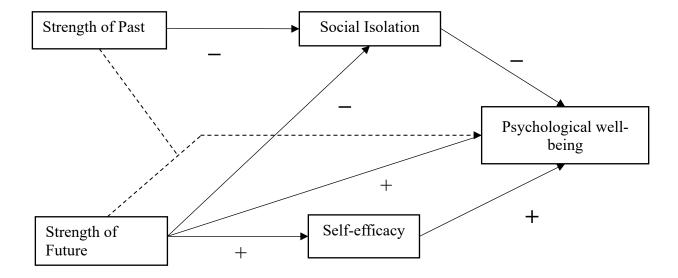


Figure 6: Proposed model for the relationship between the subjective loss of self factors with the predicted outcome variables. The dashed line represents the predicted interaction between strength of past and future identity on psychological well-being.

STUDY 2.1¹

Study 2.1 developed a measure to explore how an individual's subjective loss of self of identity within a transition related to their well-being. It additionally tested whether it was possible to integrate perceived loss with SIMIC, proposing that the *subjective loss of self* factors could act as proximal indicators of well-being risk. This also allows me to explore the role of past identities, and the loss of one's past self is required to facilitate group membership gain or whether this loss removes a buffer against psychological decline.

¹ There was an additional question around self-reported group memberships and their relationship to well-being, however the significant number of missing responses (>40%) rendered this information unusable. The study also included a number of other scale items around growth and integration; however they did not produce a meaningful scale during the factor analysis process and were discarded.

In the present study participants completed a survey online using Qualtrics which included a large sample of items linked to an individual's perception of their future, and their past. The survey also included questions on group memberships, as well as qualitative group membership changes that are not a feature of the present paper. The outcome variables for the present study included a measure of social isolation, self-efficacy, and general psychological well-being.

(H1) Strength of past self to be negatively associated with their social isolation

(H2) Strength of future self to be positively associated with self-efficacy and psychological well-being, and negatively related to social isolation.

(H3) Strength of past identity will buffer against declines in psychological well-being when an individual has lost connection to their future identity. Specifically, past identity will moderate the relationship between future identity and well-being, such that past will weaken the negative relationship between future and well-being.

a. I will also explore whether strength of past self is associated with gains in group memberships during the transition.

(H4) The effect having a strong connection to one's past and future will be mediated by social isolation and self-efficacy respectively, onto the measure of psychological well-being. The overall model for the relationship of the loss of one's past-future selves on these outcome variables is depicted in Figure 5. In the model direct relationships are represented by solid lines, while dotted lines indicate moderation.

Following preliminary testing to establish the nature of the *subjective loss of self* measures, the study will test whether they can act as proximal indicators within the SIMIC model. Consequently:

H5: It is expected that strength of future self will mediate the relationship between group membership gain and psychological well-being as depicted in Figure 5.

H6: Strength of past self will mediate the relationship between group membership continuity and psychological well-being as depicted in Figure 5.

Method

Participants

Participants (N = 273) on MTurk accessed the survey which was developed using Qualtrics survey software. Participants were required to be studying at university in the United States of America. The study was approved by the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University and participants received financial compensation for their time. The order of the questions within each scale were randomized. Duplicate or partial responses were eliminated (N=70) from the dataset using a combination of unique identifiers and their IP address or as the standard deviation of their responses indicated they selected the same answer across all items irrespective of scale valence (1). After these cases were excluded 202 participants remained (61.4% female with a median age of 25). Participants were instructed to respond to a series of past and future related items, before completing the outcome measures of social isolation, self-efficacy, and well-being.

Statistical Power

Sample size is an important requirement for structural equation modelling (SEM) to ensure replicability and better statistical outcomes. In the present study, the use of latent factors was limited to the construction of the scale. Confirmatory factor analysis (CFA) will test for two latent factors with medium communalities, for which Hair et al. (2014) suggest a sample size of 100-150 participants is sufficient. However,

the large number of items included in the scale design can result in additional latent factors. In line with the guidelines the sample was increased to 200, which is sufficient to test up to 5 latent variables with modest communalities (Hair et al., 2014). A test of post-hoc power using GPower assessing the full sample of 202 participants looking at the 34 predictors and a medium effect size ($f^2 = 0.15$) found the study had a statistical power of 0.81.

Materials: Scale Development

Subjective loss of self (SLS)

The objective of the scale was to measure an individual's subjective perception that they had lost connection to who they were, and who they would become. It was important when creating this scale to create a pool of items that captured the key theoretical ideas around identity during a transition. Thus, the questions in the full pool primarily related to themes of disconnection, being lost, having changed (or foreseeing change) or being uncertain. The creation of the items was an in iterative process involving consultation with various academics and post-graduate students familiar with the research. This process led to a pool of 34-items, 16 of which related to who they saw themselves to be in the past, and 18 to who they saw themselves to be in the future. The past self items were preceded with the statement "When I think about who I was before I began university", and the future self items with "When I think about my future after university". The items were scored on a 5-point Likert scale (strongly agree - strongly disagree) with a high score indicating that participants had a stronger connection to their past or future selves, whilst a lower score indicated a higher degree of loss of self.

The scale development process followed the guidelines of Costello & Osborne (2005) who suggest a threshold of .32 for determining which variables cross-load onto another factor. Similarly, they suggest that a factor needs at least 5 strongly loading

(<0.5) items to demonstrate its strength and consistency. The 34 items were subjected to exploratory factor analysis (EFA) using principal components as the items within the analysis were predicted to directly measure subjective sense of loss. The EFA had rotation to Promax (Kappa 4) solutions, using a maximum likelihood analysis with an Eigenvalue cut-off of 1.0. Maximum likelihood analysis is recommended for data that is relatively normally distributed as it allows statistical testing of correlations among factors and computing confidence intervals (Fabrigar et al., 1999). Promax rotation was used as some correlation was expected between the factors, which is allowed by the oblique rotation (Costello & Osborne, 2005). A total of 7 factors had eigenvalues above 1.0 and these factors accounted for 62.86% of variance in the matrix. The number of factors to extract from the dataset was determined through use of a scree test (Costello & Osborne, 2005). A scree test is a graphical representation of eigenvalues that can find the number of factors that emerge from exploratory analysis. The relevant factors are determined by the number of factors above a straight "line fitted along the eigenvalue rubble" (Rattray & Jones, 2007, p.239). Costello and Osborne (2005) suggest alleviating the subjectivity in determining the number of factors above this line by running analyses across a range of factors and selecting the analysis with the best overall fit. In the present study, scree analysis showed that either 3,4 or 5 factors were most likely to produce a well-fitting model. Comparison between the models indicated the 4-factor model provided the best, but still poor fit $(\chi 2 = 470.524, df = 272, p < .001)$. The thematic consistency of the factors was also evaluated, which suggested two of the factors consisted of items that came from both the future and past self question pools. It was determined that one of these factors captured a general sense of fear around possible changes during a transition, and the other a reflection on how they had changed, suggesting it captured whether the transition was complete rather than in process. While the meaning behind these two

potential constructs is of interest, the level of overlap between the loss of past and future focused items in these scales meant that it was not possible to be certain of the construct validity. This led to the stepwise removal of 19 items that did not cross-load onto either of the two remaining factors. The EFA run on the remaining items following this process produced a two-factor model with poor fit ($\chi 2 = 257.351$, df =76, p < .001). Having established two factors that aligned thematically with the construct of interest, Confirmatory Factor Analysis was conducted using AMOS, testing a 2-factor model with the remaining 15 items.

Analysis of the variables in the model indicated there were a number of items that had very low loading values (below 0.3). Consequently, item level thematic analysis was undertaken to determine whether deletion of these items would alter the construct validity of the remaining scale. This process led to "Who I used to be is fading away" and "I will be fundamentally the same person after university compared to who I am at the moment" being deleted from the CFA. The loss of future self item, "I will be connected to the same people that I am at the moment" had significant shared variance with items that loaded onto the loss of past self factor, and so was also removed from the analysis. One further item "I feel like my past will be irrelevant" was deleted due to low loading values (<.50). The shared variance amongst 3 similar items was accounted for by covarying the error terms. This process produced a CFA with acceptable fit, χ^2 (50) = 105.74, χ^2 ratio = 2.115, RMSEA = .075, CI90 = [.055, .095]; CFI = .928, NNFI = .905, given that the γ 2-ratio was acceptable (< 3), the CFI and NNFI above 0.90 and the RMSEA was beneath the 0.08 mark of reasonable fit (Browne & Cudeck, 1992; Schermelleh-Engel et al., 2003). While "I feel different now to who I was before university" ($\beta = .42, p < .001$) and "I have the same values as I did before university" ($\beta = .41, p < .001$) had lower standardised loading values they remained in the model as they aligned with the construct, and it is

possible for loading values to be affected by the phrasing of the question (Kline, 1999). The model fit and acceptable Cronbach's alpha for Factors 1 ($\alpha = 0.81$) and 2 ($\alpha = 0.80$) indicate that the constructed factors have decent psychometric properties, although there are weaknesses to be addressed in future studies.

Factor 1 (Strength of past self)				
When I think about who I was before I began	β	S.E	р	
university				
Who I used to be is fading away (reverse coded)	.55	.19	<.001	
I feel different now to who I was before university (reverse coded)	.42	.14	<.001	
I feel more connected to the people I was close to before university	.57	.10	<.001	
I have the same values as I did before university	.41	.17	<.001	
I was connected to the same people that I am at the moment	.60	.17	<.001	
I still see the same people as I did before I started university	.56	.08	<.001	
Factor 2 (Strength of future self) When I think about my future after university	β	S.E	р	
I don't know where I will be (reverse coded)	.75	.09	<.001	
I know what I will be doing in the future	.66	.19	<.001	

I'm not sure who I will be (reverse coded)	.81	.09	<.001
I am comfortable with who I will be	.51	.07	<.001
I have a strong sense of who I will be	.55	.08	<.001

Thus, the scale appeared to capture an individual's perception of who they were, and who they will be – without targeting the specifics of these identities. The scales were then used to test the predictions with regard to well-being outcomes across the transition. For the remainder of this thesis, these factors will be termed strength of past self and strength of future self for ease of understanding. Additionally, when run in analyses, higher scores represent a connection to one's past or future self while lower scores indicate a higher degree of loss.

Outcome Measures

Social Isolation. Perceived social isolation ($\alpha = .85$) was assessed using The Friendship Scale (Hawthorne, 2006). The scale comprises six items rated on a 5-point scale from "Almost always" to "Not at all" that measure an individual's subjective social isolation over the past four weeks. It consists of negatively worded questions targeting social contact ("I felt alone and friendless"), and positively worded questions on being connected with (e.g., I had someone to share my feelings with").

Psychological Well-being. Mental Well-being ($\alpha = .95$) was assessed using the Warwick-Edinburgh Mental Well-Being Scale (Tennant et al., 2007). The WEMWBS measures well-being through 14 positively worded items rated on a 5point scale from "Strongly Agree" to "Strongly Disagree". Examples include "*I've been feeling interested in other people*" and "*I've been feeling good about myself*". The scale has a high correlation with other mental health and well-being scales and has previously demonstrated adequate validity and reliability (Clarke et al., 2011; Trousselard et al., 2016).

Self-efficacy. Self-efficacy (α range = .95) was assessed using the New General Self-Efficacy scale (NGSE) (Chen et al., 2001). The NGSE is a positively worded 8-item scale measuring an individual's belief that they can use their skills and abilities to deal with a situation rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree". The NGSE demonstrated good reliability and construct validity (Chen et al., 2001). Example items include "*In general, I think that I can obtain outcomes that are important to me*" and "*I will be able to achieve most of the goals that I have set for myself*".

Exeter Identity Transition Scales. Group memberships were assessed using the Exeter Identity Transition Scales (EXITS), a composite scale made up of three, four item questionnaires (C. Haslam et al., 2008). Prior to the questions, there was a description of group memberships as follows "These groups could take any form - for example they could be work groups, social groups, religious groups, sporting groups or professional groups". The EXITS includes measurement of multiple group memberships before the transition ($\alpha = .92$), the maintenance of their group memberships following the transition ($\alpha = .92$), as well as their engagement with new group memberships following the transition ($\alpha = .94$). Example items include, "*Before university I joined in the activities of lots of different groups*", "*After beginning university I have strong ties with one or more new groups*". These items were rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree"

Perceived compatibility of identities. The compatibility of the identities an individual held were assessed with two reverse coded items (r = .53) adapted from the Identity Harmony scale of Brook, Garcia, and Fleming (2008). It included the items *"University takes up so much time and energy that it made it hard for me to be present* 49

in my other groups" and "I found that university and my other group memberships interfered with one another".

Results

Strength of Future and Past selves is linked to social isolation and self-efficacy

The first objective of this study was in determining whether an individual's *subjective loss of self* (SLS) was associated with transition experience outcome variables of social isolation and self-efficacy. For the present analysis all terms were observed variables and are represented by rectangles. The descriptive statistics and inter-correlations for Study 2.1 are shown in Table 2 below. The outcome variables of self-efficacy, well-being and social isolation were comparative to the norms drawn from the validation of the respective scales (Chen et al., 2001; Hawthorne, 2006; Tennant et al., 2007).

The predicted relationships were modelled in AMOS through use of Structural Equation Modelling (SEM) using maximum likelihood estimation and 1000 bootstrap samples to allow for the testing of indirect effects (Arbuckle, 1995 -1999). For all SEM analyses goodness of fit was assessed by an acceptable $\chi 2$ ratio (<2), the RMSEA below 0.80 and the SRMR being below 0.08 and the CFI greater than 0.9 (Browne & Cudeck, 1992; Kenny et al., 2015; Schermelleh-Engel et al., 2003). The hypothesized model for the relationship between the SLS factors with the well-being outcome variables was a very good fit for the data $\chi 2$ (4) = 8.19, *p* =.085, $\chi 2$ ratio = 0.205. RMSEA = .07, CI90 = [.000, .14]; CFI = .99, SRMR = .039. Unexpectedly the model also suggested a relationship between self-efficacy and the strength of past self, which improved the model fit, $\chi 2$ (3) = 0.64, *p* = .888, $\chi 2$ ratio = 0.212. RMSEA < .001, CI90 = [.000, .055]; CFI = 1.00, SRMR = .011, as depicted in Figure 7. Supporting the hypothesis (H1) strength of past identity was negatively related with an individual's social isolation (β = -.31, *p* < .001) and was also positively related to

self-efficacy ($\beta = .18, p = .006$). Strength of future identity was also as expected (H2) positively related to self-efficacy ($\beta = .45, p < .001$), negatively associated with social isolation ($\beta = .29, p < .001$) and positively associated with mental well-being ($\beta = .14, p = .008$). Unfortunately, the hypothesis (H3) for an interaction between past and future identity on well-being was not significant ($\beta = .028, p = .51$).

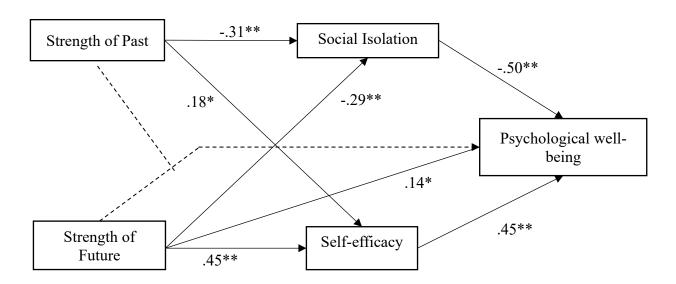


Figure 7: Standardised regression weights for the relationships between the subjective loss of self variables and the predicted outcome variables

	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Strength of past self	3.34	.67	-	-	-	-	-	-	-	-	-
2. Strength of future self	3.36	.87	.41**	-	-	-	-	-	-	-	-
3. (Pre-transition) multiple group memberships	2.73	.20	05	.053	-	-	-	-	-	-	-
4. (Post-transition) Group membership maintenance	2.77	.18	.05	.30**	.14	-	-	-	-	-	-
5. Compatibility of social identities	2.92	.72	.13	.30**	09	.39**	-	-	-	-	-
6. (Post-transition) Group membership gain	3.58	.20	.14*	.01	.14	01	.01	-	-	-	-
7. Social Isolation	2.47	.87	43**	42**	07	16*	23**	19**	-	-	-
8. Self-Efficacy	4.00	.86	.36**	.52**	.03	.086	.04	.32**	54**	-	-
9. Mental Well-being	49.80	13.09	.36**	.52**	.09	.24**	.29**	.28**	70**	.69**	-

 Table 2: Inter-correlations and descriptive statistics for SEM analysis

Notes. N (202). *p < .05, **p < .001.

I also hypothesized (H4) that both the strength of an individual's past and future selves would have an impact on well-being mediated through social isolation and self-efficacy respectively. The indirect effects were computed in AMOS through bootstrapping and with a 90% confidence interval. Each of these relationships was supported by the data, showing support for our hypothesis that SLS factors captured an individual's transition identity, and thus their risk of psychological decline during a transition. Specifically, the indirect effect for the relationship between the SLS variables and psychological well-being via self-efficacy and social isolation was significant for strength of future self ($\beta = .301$, p = .004), and strength of past self (β = .201, p = .004). Overall, the model captured 64% of the variance in well-being scores.

Integration of the constructed factors in the broader SIMIC model

Hypotheses 5 and 6 for Study 2.1 related to the relationship between group membership changes and the SLS factors. I proposed a model where the strength of an individual's future identity was consequent to an individual's gain in group memberships, and strength of past identity was consequent to maintenance of group memberships. To test this hypothesis, I first tested the SIMIC model as described in Haslam (2019). The initial model showed unacceptable model fit, however modification indices indicated substantial variance shared between post transition group membership gain, and post transition group maintenance with group membership compatibility. Covarying the error terms to account for the shared variance resulted in a model which showed good fit $\chi 2$ (8) = 5.12, p = .75, $\chi 2$ ratio = 0.64, RMSEA = .000, CI90 = [.000, .060]; CFI = 1.00, SRMR= .023. For example, the RMSEA was below 0.08, the $\chi 2$ ratio was good (<3) and the SRMR was less than 0.08 (Browne & Cudeck, 1992; Hu & Bentler, 2009; Schermelleh-Engel et al., 2003). The relationships shown in Figure 8 fit the predictions of SIMIC, also finding that

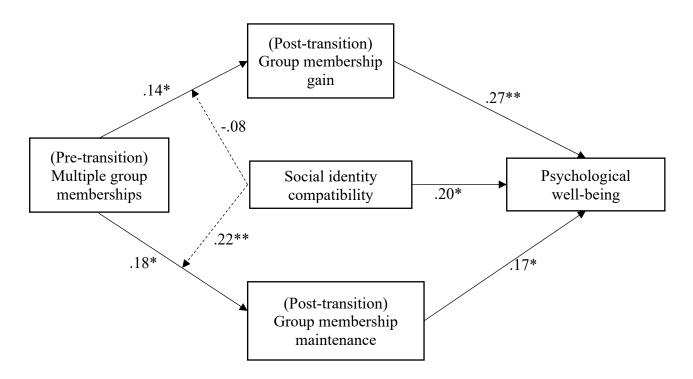


Figure 8: Standardised regression rates for the SIMIC model

social identity compatibility moderated the likelihood of maintaining an established group ($\beta = .22, p < .001$) and but not for gaining a new group membership ($\beta = .08, p = .213$) were supported by the model. The total effect of the model explained 18% of the variance in well-being scores.

Having established the SIMIC model holds for this dataset, I introduced the two identity factors, where strength of future identity was consequent to group membership gain, and strength of past identity to group membership loss. The model, depicted in Figure 9, was a poor fit for the data χ^2 (19) = 79.37, p = .000, χ^2 ratio = 4.177, RMSEA = .126, CI₉₀ = [.098, .156]; CFI = .708, SRMR = .105. and the hypotheses were not supported as group membership gain did not predict future identity (β = .007, p =.477) and group membership maintenance did not predict past identity (β = .084, p = .918). Indeed, modification indices suggested a better fitting pathway would be that future identity was predicted by the compatibility of group memberships as well as the number of group memberships maintained by the

individual. This model was a better fit for the data, χ^2 (16) = 16.54, p = .416, χ^2 ratio = 1.034, RMSEA = .013, CI₉₀ = [.000, .067]; CFI = .997, SRMR = .042. and is depicted in Figure 10.

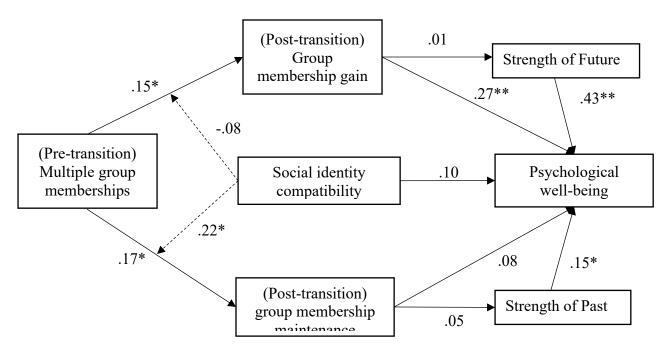


Figure 10: Standardised Regression Weights for the predicted relationships

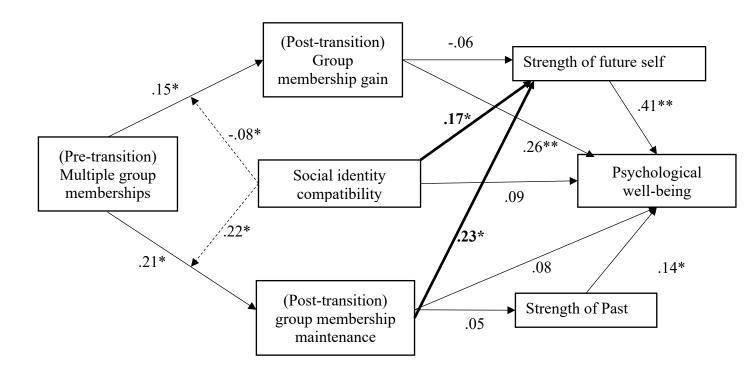


Figure 9: Standardised Regression Weights for the model after adjustments via modification indices (new relationships are highlighted in bold. No pathways were removed).

The adjusted model indicates that social identity factors do play a role in the perceived strength of one's future identity, but that the pathway is not as distinct as predicted. While the group membership change hypotheses were unsupported, the results do indicate both strength of past self ($\beta = .14$, p = .020) and future self ($\beta = .41$, p < .001) had a direct relationship with psychological well-being, and improved the variance explained from 18% from the SIMIC model alone, to 37% in the adjusted model that includes the SLS factors.

Discussion

The present study was the first to test *subjective loss of self* (SLS) and its relationships with psychological well-being and the group membership changes that are characteristic of a life transition. The study led to the development of the SLS scale which reflects the theoretical basis for how an individuals' perception of their identity relates to their well-being during a transition. Further it suggests that the strength of one's connection to their past and future selves can predict an individual's well-being in addition to that which is explained by group membership changes.

Consistent with my hypotheses the SLS factors were associated with wellbeing outcome variables of self-efficacy and social isolation. However, I also found an unexpected relationship between strength of past identity and self-efficacy. Potentially, this means that perceiving a connection to your past self helps to limit declines in an individual's sense of competency, not just their perception of being socially connected. Overall, these results provide initial support for the measurement of an individual's loss of self during periods of transition. The results also suggest that an individual who perceives a loss of their past and future selves is more likely to have poorer well-being during transition. However, the causality of this relationship cannot be ascertained by the present study due to its correlational nature. This finding

thus presents an important first step in understanding *subjective loss of self* during a transition, and how it relates to an individual's overall psychological well-being.

There were a number of findings that were inconsistent with the hypotheses, most prominently those relating to the larger SIMIC model. I predicted that strength of future self would be predicted by the number of group memberships an individual gained, and past self would be predicted by the number of lost groups, however it appeared the compatibility of group memberships was more important. The lack of a direct relationship between the number of social connections and the SLS factors suggested that rather than the number of group memberships, other characteristics such as importance, compatibility, or centrality – may provide a better indicator of an individual's capacity to cope with a life transition. From the present research, the compatibility of group memberships seems of greater importance, but will require further investigation. However, it is also noted that the SIMIC model results changed with the addition of the past and future variables, with continuity no longer impacting on well-being when the strength of past self was included. This was despite there being no significant relationship between strength of past self and the continuity variable. Additionally, introducing the strength of past self variable explained more variance in well-being than with continuity alone, suggesting the SLS factors have explanatory value for well-being that is in addition to that explained by the SIMIC factors.

The prediction that there would be an interaction between the past and future identity constructs on well-being was not supported by the data. Rather, there was a general positive effect for strength of future self on well-being that was not changed by whether or not there was a perceived loss of past self. While this was inconsistent with the hypothesis, it does still show that maintaining a connection to one's past self is not detrimental to one's well-being during a transition. Further, the positive effect of

past self directly on social isolation and self-efficacy suggests it may even be beneficial.

Study 2.1 therefore provides some preliminary evidence that an individual's subjective loss of self during a transition provides useful information about their wellbeing. There are however several caveats to the findings. First, this study presents an initial attempt at the creation of a scale and requires replication. Second, the wording of the questions, as well as the number of questions in the item pool, can affect participants responses (Kline, 1999). It is possible that when reworded and included in a smaller subset of items that the questions would be answered differently. Third, the sample which was the focus of this study was not homogenously experiencing the same transition at the same time. Study 2.1 utilised a broad sample of college students in the United States of America rather than individuals who were specifically in a transition, for example, those who had just moved or begun university. In the present study they were asked to reflect on their change in themselves since commencing, which for some members of the sample was likely a number of years prior. Consequently, questions around group memberships may have been affected by this time gap, as the length of time makes it more difficult to recall the changes in social groups. Indeed, many individuals are likely to have successfully transitioned into university. Finally, the initial study did not include measures of potential confounds that could otherwise explain the impact on well-being shown by the identity factors, such as avoidance of the transition as a result of the heightened uncertainty. Thus, there is a need to re-evaluate how group membership change relates to a sample that is experiencing the same transition.

Overall, the findings of Study 2.1 provide preliminary evidence to support the idea that an individual's subjective perception of their identity relates to their well-

being during a transition. Thus, in Study 2.2 I aimed to replicate the key findings of Study 2.1.

STUDY 2.2

The preliminary findings from Study 2.1 suggest that it is possible to capture how a transition influences an individual's *subjective loss of self* and therefore their risk of psychological decline throughout the period. However, the unclear relationship to group membership changes creates uncertainty about the mechanism by which this occurs. That being said, the SLS factors were shown to be associated with selfefficacy, social isolation, and well-being as predicted by the theory. Further, the SLS factors explained an additional 10% of variance in well-being overall, and with stronger regression weights than the group membership factors in the SIMIC model. In Study 2.2 I aim to re-evaluate the scale, to ensure replicability and construct validity. I also wish to further examine whether there is an interaction between loss of past and future self with psychological well-being. While this was unsupported in the previous study, this could be due to the varying years and stages of transition that the participants of Study 2.1 were in. As the present study uses a cohort that is going through a similar experience, it was seen as worthy of re-examination.

As with Study 2.1 it was expected that:

H1: The SLS identity factors will be positively associated with self-efficacy and negatively with social isolation as these factors represent core parts of the transition experience.

H2: Group membership maintenance will be positively associated with past identity, and new group memberships positively linked to strength of future self. If these relationships are not significant, I will also test the finding of Study 2.1 where the compatibility of social identities and maintained group memberships are associated with strength of future self.

H3: It is expected that strength of past self and strength of future self will have a positive effect on well-being, mediated through self-efficacy and social isolation.

H4: It is expected that there will be an interaction between strength of past self and future, whereby a strong past self can buffer against well-being declines when an individual perceives a loss of their future self.

In addition to the replication hypotheses, Study 2.2 included a measure of avoidance to explore whether the impact of the identity factors on self-efficacy and social isolation is better explained by an alternate mechanism. Avoidance is a coping strategy in which the individual anticipates that the stress of the situation is beyond their capacity to cope with, and results in them ignoring or removing themselves from the situation (Sexton & Dugas, 2009). While avoidance can alleviate some distress in the short term it can also interfere with taking appropriate action, leading to ignorance of the cause of the stress and fostering emotional numbing (Roth & Cohen, 1986). The inclusion of avoidance also allows me to test the idea that individuals who have a strong sense of past self are at risk of stalling in the transition. Following the line of reasoning that a strong past self can inhibit the individual's ability to transition, strength of past self should be associated with greater avoidance and thus well-being declines.

H5: It is expected that a loss of past self will be associated with higher avoidance, in turn lowering well-being. If this hypothesis is supported, it would further increase the strength of the evidence supporting the proposition that *subjective loss of self* can indicate an individual's risk of psychological decline.

Method

Participants

Study 2 involved the testing and validation of the established factor structure for the loss of past and future identity scale on an Australian undergraduate

population. Participants (N = 135) were 84% female with a median age of 19 recruited through Flinders University's Student Participation portal. Participants were first-year psychology students and received course credit for completing the study. While this sample is less representative of the general population, it is representative of Australian psychology students beginning university and a suitable sample for the life transition focused on in this study.

Materials: Subjective Loss of Self (SLS)

All 34 items from Study 2.1 were included in Study 2.2, allowing for consideration of items that were removed in the initial scale development process in Study 2.1. First, the 11-item scale in Study 2.1 was tested against the new dataset. The CFA testing a 2-factor model had poor fit χ^2 (49) = 103.65, p < .001, RMSEA = .091, CI90 = [.067, .116]; CFI = .86, NNFI = .80. Exploration of the fit indicated the item "I feel like my past is irrelevant" had a very low loading value (<0.3) and was removed from the scale. As this item was capturing the sense that an individual had lost who they were, an additional item of the 34 items included "Who I used to be is fading away" was added to the CFA to test as a replacement item and loaded onto the factor appropriately (0.86). This resulted in a model with acceptable fit χ^2 (47) = 78.16, p = .003, $\chi 2$ ratio =1.66, RMSEA = .070, CI90 = [.041, .097]; CFI = .93, NNFI = .90. For example, the χ^2 ratio (<2) was acceptable (Ullman, 2001) and so was the RMSEA with the lower bound of the 90% confidence interval being below the .05 mark for close fit and the upper bound below .10 mark of acceptable fit (Hu & Bentler, 2001). It is possible that the former item was more applicable to the college USA sample where there was a high likelihood that for many the transition to university was some time in the past, but that the latter item is more applicable for transitions that remain in progress, as with first year Australian University students.

Strength of future self ($\alpha = .72$) and strength of past self ($\alpha = .77$) had acceptable reliability.

Outcome Measures

The outcome measures of Social Isolation ($\alpha = .87$) (Hawthorne, 2006), The Exeter Identity Transition Scales (Pre-transition complexity $\alpha = .89$, Post-transition group continuity $\alpha = .90$, Post transition group membership gain ($\alpha = .88$) (Haslam , 2008), Identity Compatibility ($\alpha = .63$) (Brook, Garcia, & Fleming, 2008), Mental Well-being ($\alpha = .95$) (Tennant et al., 2007), and Self-efficacy ($\alpha = .91$) (Chen et al., 2001) were identical to those used in Study 1. Additionally, four items ($\alpha = .80$) were included to assess an individual's avoidance of university including *"I avoid thinking about my degree"*, *"I can't see a way to succeed in this degree"*, *"I have thought about dropping out"*, *"I avoid thinking about what I will do after university"*.

Procedure

As with study 2.1, all surveys were completed online via the online platform Qualtrics. In Study 2.2, the participants accessed the link to the survey through Flinders University's Research Participation Portal.

Results

Subjective loss of self makes a distinct contribution to psychological well-being during a transition

The first hypothesis of Study 2.2 related to the relationship between one's *subjective loss of self* and the transition outcome variables of social isolation and self-efficacy. As in Study 2.1, the predicted relationships were modelled in AMOS through use of Structural Equation Modelling (SEM) using maximum likelihood estimation and 1000 bootstrap samples to allow for the testing of indirect effects (Arbuckle, 1995 -1999). For all SEM analyses goodness of fit was assessed by an acceptable χ^2 ratio (<2), the RMSEA and the SRMR being below 0.08 and the CFI was greater than 0.9

(Browne & Cudeck, 1992). The descriptive statistics and inter-correlations for Study

2.2 are shown in Table 3 below.

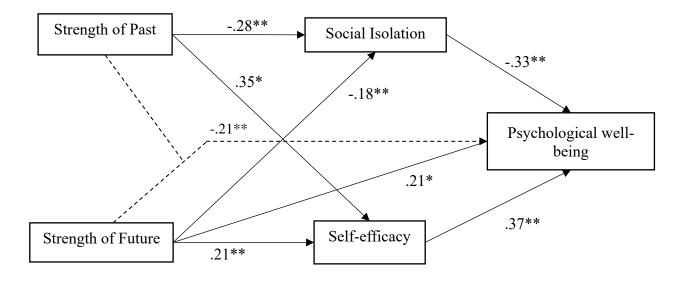


Figure 11: Standardised Regression Weights for the relationship between the identity factors and outcome variables

The model for the predicted relationships is depicted in Figure 11 and was a good fit for the data, $\chi 2$ (2) = 1.82, p = .40, $\chi 2$ ratio = 0.91, RMSEA < .001, CI90 = [.000, .166]; CFI = 1.00, SRMR = 0.03. While the upper bound of the RMSEA was greater than 0.1 Kenny, Kaniskan and McCoach (2014) argue that small number of degrees of freedom artificially inflate the RMSEA. The results supported the hypotheses (H1 and H2) for the relationships between SLS variables with social isolation and self-efficacy. Specifically, strength of past self was negatively related with an individual's social isolation ($\beta = -.28$, p = .001), and had a positive relationship with self-efficacy ($\beta = .35$, p < .001). Strength of future self was also negatively related to social isolation ($\beta = -.18$, p = .029), and positively related to self-efficacy as was expected ($\beta = .21$, p = .010). Strength of future self also again demonstrated a direct positive association with well-being ($\beta = .21$, p = .001).

The results of the model also supported the hypothesis (H3) that self-efficacy and social isolation would mediate the relationship between the SLS variables and psychological well-being. The mediated effect of strength of past self ($\beta = .221, p$ = .004) and strength of future self ($\beta = .139, p = .008$) on well-being were significant, supporting the hypothesis. Further, the model explains 56% of the variance in wellbeing scores.

	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Strength of past self	3.09	.79	-	-	-	-	-	-	-	-	-
2. Strength of future self	3.18	.70	.14	-	-	-	-	-	-	-	-
3. (Pre-transition) Multiple group memberships (EXITS)	3.23	1.18	03	01	-	-	-	-	-	-	-
4. (Post-transition) Group membership maintenance (EXITS)	3.36	1.05	.40**	.09	.04	-	-	-	-	-	-
5. Compatibility of social identities	2.78	.98	.12	.06	.47**	.15	-	-	-	-	-
6. (Post-transition) Group membership gain (EXITS)	2.91	1.11	.05	.06	17	07	02	-	-	-	-
7. Social Isolation	2.55	0.97	32*	33**	.08	25*	01	31**	-	-	-
8. Self-Efficacy	3.90	068	.17	.40**	03	003	.18*	.01	-34**	-	-
9. Mental Well-being	47.69	12.31	.25*	.48**	09	.129	.17*	.24*	56**	.59**	-

Table 3: Intercorrelations and descriptive statistics for SEM analysis

Notes. N (135). *p < .05, **p < .001.

Extending from this result I then assessed whether strength of past self could act as a buffer against psychological decline for those who had experienced a loss of future. The results as shown in Table 4 supported the hypothesis (H4) as there was a significant interaction between strength of past self and future on psychological wellbeing ($\beta = -.21, p < .001$), Step 1 $F(4, 130) = 36.77, p < .001, R^2 = .53$; Step 2 F(5,129) = 34.92, $p < .001, R^2 = .58$. As shown in Figure 12, the detrimental effect of losing one's future self was reduced for individuals who had a strong past self. This suggests that having a subjective connection to who one was in the past may not be detrimental to well-being and could even be beneficial.

Table 4: Inferential statistics for the interaction of past and future identity on well-being

	В	S.E	β
Step 1			
Self-efficacy	.42**	.12	
Social Isolation	.35**	.09	
Strength of Future	.21*	.12	
Strength of Past	.05	.08	
Step 2			
Self-efficacy	.40**	.11	
Social Isolation	.33**	.09	
Strength of Future	.24**	.13	
Strength of Past	.06**	.09	

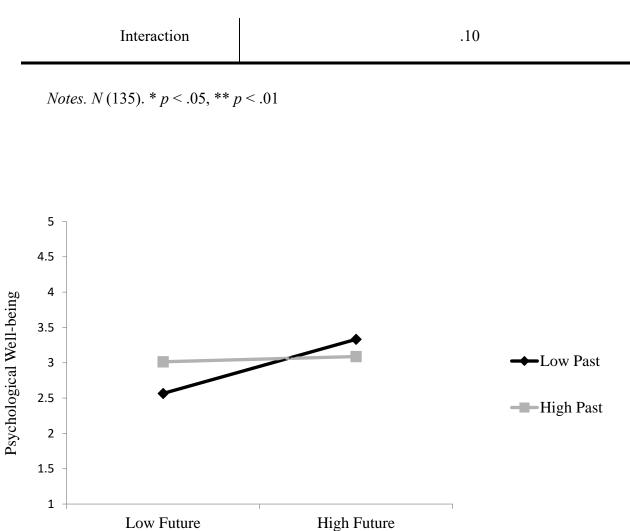


Figure 12: Interaction of strength of future and strength of past identity with

psychological well-being

Avoidance does not better predict well-being outcomes

Having established the consistency of the model on the primary outcome variables, I tested whether avoidance would account for the relationships found for the SLS factors. I added avoidance as a covariate to the identity factors, with direct pathways to self-efficacy, social isolation, and psychological well-being. The model fit was acceptable, $\chi 2$ (2) = 2.54, p = .28, $\chi 2$ ratio = 1.27, RMSEA = .045, CI90 = [.000, .184]; CFI = .998, SRMR = 0.03. While some of the relationships were slightly weaker, the model indicated the effect of past and future identity on the outcome was present even accounting for the impact of avoidance. Consequently, I tested whether

strength of past self was related to their level of avoidance. I ran a linear regression of strength of past self on avoidance, controlling for strength of future self, social isolation, psychological well-being, and self-efficacy, Step 1 F(4, 130) = 19.79, p < .001, $R^2 = .38$; Step 2 F(4, 129) = 19.79, p = .002, $R^2 = .05$. The inferential statistics are depicted in Table 5 and shows that individuals who lost connection to their past had high levels of avoidance ($\beta = .25$, p = .002). Thus, it does not appear that a strong past is a barrier to engagement with the university. Indeed, it suggests that an individual who has let go of who they were was more likely to engage in avoidance behaviours.

	В	S.E	β
Step 1			
Self-efficacy	42*	.13**	29**
Social Isolation	09*	.09	09
Mental Well-being	33*	.12*	29*
Strength of Future	23*	.08*	23*
Step 2			
Self-efficacy	33*	.13	23*
Social Isolation	13	.08	13*
Mental Well-being	31*	.11	27*
Strength of Future	19*	.08	19*
Strength of Past	25*	.08	25*

Table 5: Inferential statistics for the regression analysis of avoidance on past identity

Notes. N(135). * p < .05, ** p < .01

The impact of group membership changes on well-being

As with Study 2.1 the SIMIC model was tested to understand how it mapped onto the sample of first year university students. This model was initially a poor fit for the data, $\chi 2$ (7) = 48.42, p < .001, $\chi 2$ ratio = 6.92, RMSEA = .21, CI90 = [.16, .27]; CFI = 0.29, SRMR = .10. Modification indices suggested a direct relationship between group membership's pre transition with the compatibility of their group memberships. Including this pathway somewhat improved the fit of the model $\chi 2$ (6) = 15.27, p = .018, $\chi 2$ ratio = 2.55, RMSEA = .11, CI90 = [.041, .176]; CFI = 0.84, SRMR = .062. It is unexpected that there was not support for the model proposed by SIMIC, thus it is not meaningful to further explain the pathways within the model.

Inclusion of the SLS factors as predicted by the hypotheses produced a model with poor fit, χ^2 (16) = 52.88, p < .001, χ^2 ratio = 3.31, RMSEA = 0.13, CI90 =

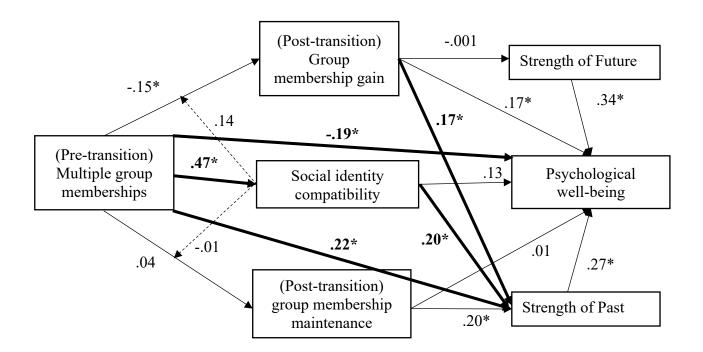


Figure 13: Effect of SIMIC on Psychological well-being when including the SLS factor. Additional relationships compared to the hypothesis are in bold. No relationships were removed.

[.09, .17]; CFI = 0.731, SRMR = 0.98. The modification indices suggested an individual's pre-transition group memberships was a direct predictor of well-being (β = -.19, p = .010) and strength of past self ($\beta = .47$, p < .001), and that group membership compatibility ($\beta = .20, p = .016$) and group membership gains ($\beta = .16, p$ = .039) were predictors of strength of past self. The potential for a pathway between compatibility and strength of past self was foreseen from the results of Study 2.1, although it was unexpected for relationships to also be found for strength of past self with pre-transition group memberships and group membership gain. Inclusion of the two pathways produced a model with improved fit, χ^2 (12) = 22.58, p = .032, χ^2 ratio = 1.88, RMSEA = 0.081, CI90 = [.02, .13]; CFI = .923, SRMR = 0.069. As shown in Figure 13, the results suggest partial support for my hypotheses as group membership maintenance predicted strength of past self ($\beta = .20, p = .017$) but group membership gain did not predict strength of future self ($\beta = -.001$, p = .994). Surprisingly, group membership maintenance did not predict well-being independently ($\beta = .01, p = .84$), and only weakly indirectly through strength of past self ($\beta = .04$, p = .026). This suggests that the direct effect of strength of past self ($\beta = .27, p = .001$) and strength of future self ($\beta = .34$, p < .001) identity on well-being is largely independent to that which is explained by changes in the number of group memberships an individual holds during a transition. Further supporting this argument is the increase in variance explained by the model, from 10% in the base SIMIC model to 33% when including the SLS factors.

Discussion

Importantly, Study 2.2 provides additional support for the Subjective Loss of Self (SLS) scale by again finding an association between the SLS and the predicted well-being outcomes. The most important finding of Study 2.2 is in the reliability of the scale and its relationships to the well-being outcome variables, although it is noted

that there was a change to a single item. The SLS factors, strength of past and future selves, maintained a strong relationship to self-efficacy, social isolation, and psychological well-being as was predicted. In terms of its relationship to SIMIC, there was support for the predicted relationship between group membership maintenance and strength of past self. Study 2.2 also found evidence of an interaction between the SLS factors with psychological well-being. The interaction suggests that having a strong sense of past identity is more important in situations where the individual has a lost connection to their future self. Potentially a strong past may act as a buffer against immediate psychological decline in these situations as it prevents the individual from existing within the transitional phase between their past and future indefinitely. This is contrary to one of the proposed arguments around maintaining the past self: that failure to let go of who you were will cause greater psychological distress, as the individual will be unable to move forward. Instead, this finding suggests that maintaining a strong past may be beneficial at least until an individual perceives themselves having a strong sense of future identity. A target for future research is to determine whether reliance on one's past becomes detrimental over time or increases the length of the transition.

This finding was strengthened by the results for avoidance, as it appears that individuals who have lost connection to their past are the most likely to engage in avoidant behaviours. As these behaviours decrease their likelihood of engaging in further social interactions, it could be that the loss of a past self creates a barrier against new social connections by facilitating avoidance. If so, it highlights the utility of social psychological interventions that can strengthen social relationships and develop healthier social networks.

Surprisingly, this study found that many of the pathways to well-being predicted by SIMIC were not supported for this population. Indeed, the result

suggested that individuals who held more pre-transition groups were less likely to gain group memberships and had poorer well-being than those who reported fewer pre-transition groups. Given the characteristics of the sample who generally live at home in their first year of university, it is plausible that those who arrived at university with larger social networks did not seek to gain additional groups, and thus missed out on the benefit of making new university connections. The results also found that pre-transition group memberships also predicted compatibility, suggesting the more group memberships an individual held prior to the transition, the more able they were to manage the competing demands of their pre and post transition group memberships. Additionally, group membership compatibility had a relationship with strength of past self. Potentially, it is not the changes in group memberships which matters, but the degree to which they allow the individual to perceive themselves as consistent with who they used to be. If so, the compatibility of group memberships is of more importance to avoiding a subjective loss of self than changes in the number of group memberships. Overall, the relationships found suggest that the ability of an individual to see their group memberships as compatible may provide a buffer to their well-being by allowing the individual to maintain a strong past self even with the loss of group memberships.

As with Study 2.1 there was no significant relationship between strength of future self and group membership gain in the present study. However, the study provides some additional evidence that SLS is important to our well-being during periods of transition. Indeed, it suggests that this effect is over and above that predicted by group membership changes alone.

Overall, the findings of Study 2.2 reinforce the idea that perceiving a loss of self has an impact on their well-being during a transition. This study also suggests that one's past self does not interfere with well-being, but it instead may buffer against

potential decline. However, the relationship of these factors with group membership,

and how group membership changes affect well-being, remains uncertain.

Table 6 Summary of key results for Study 2.1 and 2.2

	Study 2.1		Study 2.2						
Strength of Past \rightarrow	Social Isolation	$\beta =31, p < .001$	Strength of Past \rightarrow	Social Isolation	$\beta =28, p = .001$				
Strength of Past \rightarrow	Self-Efficacy	β = .18, <i>p</i> =.006	Strength of Past \rightarrow	Self-Efficacy	$\beta = .35, p < .001$				
Strength of Future \rightarrow	Social Isolation	β =29, <i>p</i> < .001	Strength of Future \rightarrow	Social Isolation	$\beta =18, p = .029$				
Strength of Future \rightarrow	Self-Efficacy	$\beta = .45, p < .001$	Strength of Future \rightarrow	Self-Efficacy	$\beta = .21, p = .010$				
Strength of Future \rightarrow	Mental Well-being	$\beta = .14, p = .008$	Strength of Future \rightarrow	Mental Well-being	$\beta = .21, p = .001$				
Interaction of SLS \rightarrow	Mental Well-being	$\beta =028, p = .51$	Interaction of SLS \rightarrow	Mental Well-being	β =21, p < .001				
(Post-transition) group			(Post-transition) group						
membership gain) →	Strength of Future	$\beta =062, p = .310$	membership gain) \rightarrow	Strength of Future	$\beta = -040, p = .645$				
(Pre-transition)			(Pre-transition) Multiple						
Multiple group	Strength of Past	β =050, p = .477	group memberships \rightarrow	Strength of Past	$\beta = .20, p = .007$				
memberships \rightarrow									
Social Identity			Social Identity		<i>a</i> 20 000				
Compatibility \rightarrow	Strength of Future	$\beta = .171, p = .010$	Compatibility \rightarrow	Strength of Past	β = .20, p = .009				

General Discussion

The two studies included in this chapter provide preliminary evidence that *subjective loss of self* (SLS) can provide a measure of an individual's vulnerability to psychological decline during a transitional phase. Both Study 2.1 and 2.2 indicated a role for the SLS factors in predicting an individual's psychological well-being, in addition to that explained by changes in group membership. The findings suggest a possible gap in the current transition literature, as measuring an individual's *subjective loss of self* could, with further research testing change over time, provide a means to assess the likelihood of psychological decline. Further, the results also suggest that the ability to maintain a strong past, at least early in the transition is beneficial, and does not limit their ability to engage with new groups.

One important finding was that the SLS factors explained a greater amount of variance in psychological well-being when included in the SIMIC model than group membership changes alone. It is of course possible that for these university populations, group membership change was not salient, and so they did not recognize the number of groups maintained or lost in the transition. In addition, the relationship between SLS with SIMIC was inconsistent, suggesting that the proposed relationship between group membership changes and strength of past and future selves requires further investigation. Potentially there are additional factors such as importance, frequency of pre-transition contact or attitude towards the transition that determine the degree to which one perceives a loss of self during the transition. Specifically, the importance of the group membership lost may relate to whether the loss of one's past or future is more important. For example, it may be that individuals who lose a role that has defined their identity such as being a firefighter may rely more on maintaining a strong sense of future to support their identity. Or it may be that these individuals need to feel connected to who they were as a firefighter in order to move

on. Additionally, whether an individual desires the transition, may act as a moderator in determining the degree of identity loss that occurs following a transition event. These ideas merit research in a future paper.

What is particularly interesting about the findings from these two studies, is that an individual's sense of who they are going to be in the future was unrelated to their engagement with new groups. One potential explanation is that the groups an individual gains early in their time at university may not align with the individuals perceived future pathway. This is especially salient in a first-year course like psychology, which includes students who come from a wide variety of disciplines. Alternatively, it could be that an individual does not yet see their new group attachments as meaningful and thus underestimated their interactions with new groups since beginning university. Another possible explanation is that strength of future self and group membership gains were independent in these studies because they are not inherently linked. An individual's interactions with new group memberships (such as joining a society at university) may have no impact on how they perceive who they will be in the future; or indeed they may even be detrimental if it forces the individual to wonder who they are and will be; or they could be irrelevant if they have no link to an individual's life beyond university. Instead, it may be that strength of future self is a consequence of already having established the group memberships that will support you in the future. Or that strength of future self is more closely aligned to the importance and compatibility of the group memberships gained or lost. Future research should explicitly focus on the core identity that has shifted, such as the student identity or workplace identity, to determine whether gaining this identity predicts a strengthening of future identity.

As expected, the results of both studies show that gains in group memberships are predictive of well-being during a transition, and that the compatibility of these

groups also plays a role. This aligns with SIMIC as it suggests that the negative effects of life transitions can be mitigated to a degree by engagement with new groups, provided they are compatible with the remaining groups from one's past (Iyer et al., 2009). However, the findings also highlight how the SIMIC model alone explains less variance in psychological well-being than when the identity factors were included, suggesting the measurement of SLS has merit for further research. Future research should continue to test how group membership gain and loss relates to an individual's SLS as the present inconsistent findings indicate the relationships may be more complicated than predicted.

The two studies in this chapter also provide the scale development portion of this thesis. The results of the factor analyses indicate that the SLS scale is internally consistent and has reasonable statistical properties for the present analysis (Costello & Osborne, 2005; Hermida, 2015). Whether the scale truly captures SLS is less clear as it was not tested against a potential third variable such as tolerance for uncertainty. Further studies should continue to revise the scale and demonstrate that it reflects an individual's self-perception of their past and future selves rather than an alternate construct.

The present results suggest that one's SLS during a transition provides a marker for an individual's vulnerability to psychological decline. The scale developed in this Chapter is a short, easily scalable measure by which to assess changes in an individual's self-definition. Future research should look at the relationship between the identity variables and other group membership related factors, as well across different types of transition. Determining how these variables interact would allow this measure to be used as an assessment tool that indicates who would benefit from a social psychological assessment using Social identity Mapping (Cruwys et al., 2016), or intervention, such as Groups 4 Health (C. Haslam, Cruwys, et al., 2019). It also

provides a range of possibilities for further research in self-continuity, as it is a means to capture changes in identity that are not predicated on the individual remaining the same. It will be important that research assesses changes in these SLS factors over time, as this will determine what predictive capacity (if any) they hold. Finally, this line of research could explore the idea that some transitions are unending, and whether this relates to their subjective sense of self – such as being a consequence of losing both ones' past and future selves. Overall, this study provides a preliminary basis from which to explore the impact of subjective identity change on well-being during life transitions.

Understanding psychopathology in the workplace through experiences of transition

Chapter 3

Understanding psychopathology in the workplace through experiences of transition

As we progress through life, each of us encounters meaningful transitions in both our personal and professional lives. While each of these can be destabilizing, the economic and psychological impact of poorly handled transitions in the workplace is profound, with the potential for both resignation and psychopathology. Indeed the proliferation of transition management resources speaks to the risk of a poorly managed transition: A negative impact on well-being and reduction in workplace performance (Marks, 2006). Additionally, untreated psychological conditions are costing Australian workplaces approximately \$10.8 billion per year (Beyond Blue, 2014). Thus, understanding what impacts on psychological well-being during transitions is significant for both the economic impact and the impact on psychopathology for the staff involved. A predecessor of much modern transition theory, Kurt Lewin (1947) argued that to successfully transition, workers must accept that their previous role has been lost, before they are able to engage with their future. These ideas remain relevant and are a theme of modern transitions which occur ever more frequently as companies seek to solidify their position by buying out or merging with other organisations (Achim, 2015). Consequently, each organisation requires and plans for assisting their workforce to adjust to the transition (Cunningham, 2006; Marks, 2006; Nadler, 1982). Transition management philosophy has built on Lewin's argument, focusing on the individual's ability to adjust to the change through the teaching of coping skills, stress management techniques and problem solving (Marks, 2006). It may also be spearheaded by transition managers, whose main role is to increase the individual's perception of control over the change to their role and company (Adler & Castro, 2019). Whilst effective on a broad scale, workplace

transitions remain a period where declines in well-being and performance remain common and are associated with a rise in mental health conditions and distress (Hamid-Balma, 2016; Maheen & Milner, 2019). This may be partially due to the individual focus which suggests if an individual is not coping with the transition, that this is their issue, and neglects to account for how the transition impacts on their social networks and the individual's perception of themselves. In addition, the whole of the organisation may be experiencing a change at the group level, so the people or supports that an individual used to rely on may no longer be available. The findings of Chapter 2 suggest that both our group memberships changes, as well as one's subjective loss of self are predictive of well-being throughout a transition. If these findings generalize to workplace transitions, then we would expect workers who are able to maintain a connection to who they were before the restructure or merger, and in doing so have a stronger a sense of their past, to have better overall well-being than their colleagues. Employees who experience a loss of past, who also have not developed a strong future in the post-merger company would be potentially vulnerable to well-being declines during transition.

The present study examines participants' experiences whilst within an organisational transition. The study tested whether a *subjective loss of self* was associated with psychological decline, as well as its relationship to changes in group memberships.

Periods of vulnerability during a transition

Transition literature around mergers suggests that an individual's vulnerability to psychological decline is determined by whether they were able to let go of their previous role, as if it is maintained it is thought to prevent them from identifying with their new role (Bridges, 1986; Levinson, 1978; Marks, 2006). However, some researchers outside of the business field argue that maintaining a relationship with

one's past identity can have a beneficial effect during the transition (Van Leeuwen et al., 2003), or even be essential to developing an integrated self at the conclusion of the transition (Schumacher & Meleis, 1994). This latter perspective aligns with the outcomes of Study 2.1 and 2.2, where strength of past self buffered the individual against feeling isolated or ineffectual. However, it remains uncertain whether this extends to workplace restructures and mergers, where the transition may be internal, and its significance not acknowledged by the people instigating the change. Examining this population using *subjective loss of self* in combination with the recognised impact of group membership changes as theorized by the Social Identity Model of Identity Change (Jetten & Pachana, 2012) should provide detail as to how workplaces can better support their employees when initiating significant workplace transitions.

In entering a merger, individuals will vary in the degree to which they identify with their organisation and their role. Indeed one of the key roles for a transition manager is to help employees develop a positive level of identification with the new company or structure (Nadler, 1982). As discussed, not all members of the organisation will experience a transition, those who only peripherally identify will adjust to the change without significant disruption. However, individuals who did identify with their company and/or role, are expected to experience a destabilization of their sense of self as the merger has removed an important social identity (Bridges, 1986; Fiol, 2002).

We know that the loss of social identities often precipitates well-being declines (Boswell & Cudmore, 2014; Iyer et al., 2009; Ng et al., 2018; Praharso et al., 2017). Yet, it is often difficult to determine which individuals will be most impacted by a transition, as the subjective importance of a group membership is often hard to establish prior to the change as they are part of our normative experience and may not

be seen as especially meaningful In addition, some transitions such as the birth of a child or being diagnosed with an illness do not explicitly or centrally involve the loss of a group membership (although they are often consequent) yet remain significant and distressing periods of change. Similarly, in the workplace a merger may make it more difficult for the individual to categorize themselves as a member of the organisation, but not explicitly alter any of their group memberships. Or alternatively, it may substantially disrupt their group memberships through teams being dissolved, roles changing, and different organisational structures being implemented. Here the transition has destabilized the individual's self-concept, meaning the individual is likely to experience declines in well-being, reduced productivity in the workplace and increased isolation (Bridges & Mitchell, 2000; Hamid-Balma, 2016). While it is all but certain that an individual's self-concept will be impacted by a merger or transition, they may not recognize this, and the changes in their group memberships may not happen immediately. Consequently, I argue that measurement of subjective loss of self provides a means to assess the impact of various gains and losses in group memberships that are in flux during a transition. If we can understand how the merger impacted on the individuals' perception of themselves within the transition itself, we can quickly identify those at risk before they consider resignation or are put on probation. As such, these individuals who have lost connection to who they were, and who they will become, will be more likely to experience poor mental well-being. Exploring the potential for Tolerance of Uncertainty to better explain the results

In Chapter 2 I found evidence that an individual's subjective perception of identity had a measurable and meaningful impact on their well-being that was in addition to that explained by group membership changes and avoidance. Potentially *subjective loss of self* mirrors an individual's capacity to cope with the uncertainty that

is a key characteristic of transitions. Alternatively, it is possible that these feelings of loss are more intense for people who experience uncertainty as more distressing.

Tolerance (or intolerance) of uncertainty is an individual difference that describes an individual's capacity to cope with the potential for negative events to occur, irrespective of their likelihood (Carleton et al., 2007). Individuals with a low tolerance of uncertainty are suggested to have higher rates of anxiety and excessive worry (Laugesen et al., 2003), both factors which impact on psychological well-being. Further, an inability to tolerate uncertainty is also associated with lower levels of goaldirected action and avoidance of any situation involving uncertainty (Dugas et al., 1997). I suspect that individuals with a low tolerance of uncertainty will be more likely to avoid their work or key responsibilities of their role, causing a decline in how competent and efficacious they see themselves in their role. Therefore, it is possible that an individual's tolerance of uncertainty moderates the relationship between SLS and well-being, such that SLS will have the strongest negative effect when the individual has low tolerance compared to high tolerance for uncertainty. Should this pathway not be found, it is also important to demonstrate that the relationship between the SLS variables with well-being is independent of that explained by tolerance of uncertainty.

Understanding the impact of group membership change within the workplace

During a transition, an individual experiences a disruption to who they saw themselves to be, which may or may not explicitly involve group membership changes. We know that the number of group memberships an individual is linked to before the transition, will be a predictor of their well-being, provided their new group memberships are compatible (Iyer et al., 2009). Further, we know that individuals who are able to maintain these group memberships, or develop new ones are expected to have better well-being than those who do not (Greenaway et al., 2016). A recent

paper by McNamara et al. (2021) provides one of the few examples of SIMIC being applied to the experience of individuals losing an important identity due to organizational change. This paper which found that retired firefighters felt a profound loss of meaning and became socially isolated emphasizes the need for further research in this area. As we have discussed, organisational changes often involve widespread disruption to people's roles, responsibilities, and colleagues, so it is likely that group memberships and their linked social identities are placed at risk. However, it is also possible that individuals are less likely to lose group memberships in this form of transition, which would mean that their number of pre-transition group memberships, and the compatibility of these groups following the transition event would be more relevant predictors. If so, the compatibility of these groups is likely to have the largest impact on the individual's sense of self, and thus on their subjective loss of self. This would then make the SLS variables a proximal indicator of declines in well-being compared to group membership changes. That being said, as with the predictions of SIMIC I expect gaining new groups to be associated with successful transition completion (indicated by higher well-being), moderated by the compatibility of these groups with their previous identity. Similarly, engagement with their pre-transition group memberships should predict well-being as they are unlikely to experience a loss of these relationships.

STUDY 3

The present study examines the experiences of individuals experiencing a merger or restructure as a means to assess their vulnerability to psychological decline. As discussed, within an internal business merger it may be that group membership changes are less apparent to the individual experiencing them, making SLS a proximal indicator. Consequently, the present study will examine how an individual's SLS relates to their well-being, as well as whether it provides information that is in

addition to that explained by group membership changes. Further, the present study seeks to validate the scale development process in Chapter 2, by testing whether the scale is distinct from an individual's tolerance of uncertainty, as well as replicating the factor structure. Finally, Chapter 2 indicated that strength of past self can have a beneficial effect on well-being, and in Study 2.2 acted as a buffer against psychological decline when an individual had lost connection to their future. Given the inconsistency of this finding, it is necessary to investigate it further in the present study.

In this study, I surveyed individuals who self-reported that they were experiencing a restructure or merger of their organisation. Given the significant economic impact of mental health within the workplace, I included the Depression, Anxiety and Stress (DASS) scales as my outcome measure (Lovibond & Lovibond, 1996), in addition to measures of self-efficacy, tolerance of uncertainty, social isolation and psychological well-being. The DASS scales allow investigation of the level of psychopathology within the workplace, which I predict will be linked to the impact of the transition on their self-concept.

Hypotheses

H1: Strength of future self will be positively associated with self-efficacy and psychological well-being, and negatively associated with social isolation as shown in Figure 14.

a. These relationships will be maintained when controlling for tolerance of uncertainty.

H2: Strength of past self will be negatively associated with social isolation and positively associated with self-efficacy and have a mediated positive effect on wellbeing as shown in Figure 14.

Understanding psychopathology in the workplace through experiences of transition

a. These relationships will be maintained when controlling for tolerance

of uncertainty.

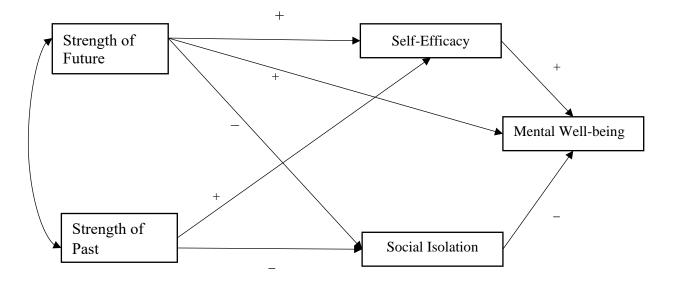


Figure 14: Predicted relationship between the SSL variables and the transition relevant psychological factors

H3: Strength of past self will moderate the association of strength of future self on mental well-being. Specifically, a strong past will attenuate the positive relationship between strength of future self and mental well-being.

a. The interaction will also be tested against the DASS outcome variables of depression, anxiety, and stress.

H4: Tolerance of uncertainty will moderate the association of the SLS factors with well-being. SLS will have the strongest negative effect when the individual has low tolerance compared to high tolerance for uncertainty.

H5: Strength of future self will mediate the effect of group membership growth on well-being

H6: Strength of past self will mediate the effect of group membership maintenance on well-being

Understanding psychopathology in the workplace through experiences of transition

H7: The compatibility of an individual's group memberships will be positively associated with an individual's strength of past and future selves

Method

Participants

In total, 229 participants participated in the survey conducted via Amazon Mechanical Turk (MTurk), of which 202 completed the study (105 males, 97 females, aged 22-69, median 36, M = 38.00, SD = 10.33). Eligibility for the survey required the individual to self-report experiencing, or to have recently experienced a restructure or merger within their organisation. Two participants did not provide responses to the question validating that they were working or had worked at an organisation experiencing this change and were removed from the sample. Of the final sample (N = 227), 140 participants reported not losing a group membership over the course of the transition.

Materials

Subjective Loss of Self Scale (SLS)

The scale that resulted from Study 2.2 was altered to focus on workplace change rather than university, and the original pool of questions examined for any additional items that may better fit this sample. This led to the inclusion of "*I feel* disconnected to the life I had before [change event]", "I feel I can no longer express my core values" and "Before this, I was more clear about what was important to me" (all reversed) in the scale relating to strength of past self, and the inclusion of "*I feel very uncertain around who I will be in the future*" (reversed), "I know which people I will have around me", "My future pathway is clear to me" and "When I think about myself in the future, I'm not sure what that will look like" (reversed) in the scale of items for strength of future self. The 18-items were subject to exploratory factor

analysis (EFA) with rotation to Promax (Kappa 4) solutions; using a maximum likelihood analysis with an Eigenvalue cut-off of 1.0 and produced a two-factor model with poor fit χ^2 (118) = 309.319, p < .000. The result of the EFA indicated "I'm not sure who I will be" and "I feel very uncertain about who I will be in the future" were cross-loading on both factors, while "I am concerned I can no longer express my core values" and "When I think about myself in the future, I'm not sure what that will look *like*" did not have a high loading values (< 0.5). These items were removed from the scale refinement process and the remaining 14 items were subjected to confirmatory factor analysis (CFA) The model initially showed poor fit χ^2 (97) = 295.619, p < .000, RMSEA = .101, CI₉₀ = [.088, .115]; CFI = .885, NNFI = .857. Exploration of the model indicated that there was substantial residual correlation between strength of future items 5 and 6, as well as a separate residual correlation between strength of past items 2, 3 and 4. When the model included these relationships the overall fit was good, χ^2 (71) = 133.277, p < .000, χ^2 ratio = 1.89, RMSEA = .067, CI₉₀ = [.049, .084]; CFI = .956, NNFI = .944. For example, the χ^2 ratio (<2) was acceptable (Ullman 2001), and so was the RMSEA with the lower bound of the confidence interval being below the .05 mark for close fit and the upper bound marginally greater than the .08 mark of reasonable fit (Hu & Bentler, 1999). The scale shows good convergent validity through the relatively high loadings (> .06) of the individual items on their respective factor as seen in Table 7. Strength of past self ($\alpha = 0.89$) and strength of future self ($\alpha = .875$) factors had strong reliability and were only moderately correlated (r = .41) indicative of acceptable divergent validity.

Factor 1 (Strength of past self)	β	S.E	р
My sense of self was stronger before this change	.81	.07	<.001

My values have changed since this has happened	.55	.09	<.001	
My beliefs have changed since this change has	60.	.08	<.001	
occurred				
I am not the same type of person that I was	.64	.08	<.001	
before the change	.04	.08	<.001	
I had a better idea about who I was then	.77	.07	<.001	
Before this, I was more clear about what was	.72	.08	<.001	
important to me	.72	.00	~.001	
I am concerned that I am losing (have lost) who	.73	.07	<.001	
I was	.75	.07	< . 001	
I feel disconnected to the life I had before the	.65	.08	<.001	
change in my workplace	.00	.00	001	
Factor 2 (Strength of future self)				
I know which people I will have around me	.65	.08	<.001	
I know where I will be	.83	.07	<.001	
I know what I will be doing	85	07	<.001	
I am comfortable with who I will be	.59	.08	<.001	
I have a strong sense of who I will be	.66	.07	<.001	
My future pathway is clear to me	.78	.08	<.001	

Group membership changes. Group memberships were assessed using the Exeter Identity Transition Scales (EXITS), a composite scale made up of three, four item questionnaires (C. Haslam et al., 2008). Prior to the questions, there was a description of group memberships as follows "These groups could take any form - for

example they could be work groups, social groups, religious groups, sporting groups or professional groups". The EXITS includes measurement of the individual's number of pre-transition group memberships ($\alpha = .91$), the maintenance of their group memberships following the transition ($\alpha = .92$), as well as their gain in group memberships following the transition ($\alpha = .94$). The questions were rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree"

Psychological Well-being. Mental Well-being ($\alpha = 0.94$) was assessed using the Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007). The WEMWBS measures well-being through 14 positively worded items rated on a 5point scale from "Strongly Agree" to "Strongly Disagree". The scale has a high correlation with other mental health and well-being scales and has previously demonstrated adequate validity and reliability.

Psychological Distress. The level of psychological distress was measured by the DASS-21 (Lovibond & Lovibond, 1996), which includes the depression ($\alpha =$ 0.94), anxiety ($\alpha = 0.87$) and stress ($\alpha = 0.88$) subscales. For this sample, 30% met the criteria for moderate or severe depression (score greater than 7), 28% for moderate or severe anxiety (score greater than 6) and 19.5% for moderate or severe stress (score greater than 10). Cut-off scores for the DASS-21 were drawn from the manual produced by the authors of the scale. The questions were rated on a 4-point scale, "Never", "Sometimes", "Often" and "Always".

Social Isolation. Perceived social isolation ($\alpha = 0.88$) was assessed using The Friendship Scale (Hawthorne, 2006). The scale comprises six items were rated on a 5-point scale from "Almost always" to "Not at all" that measure an individual's subjective social isolation over the past four weeks. It consists of negatively worded questions targeting social contact ("I felt alone and friendless"), and positively

worded questions on being connected to others (e.g., "I had someone to share my feelings with").

Self-efficacy. Self-efficacy ($\alpha = .92$) was assessed using the New General Self-Efficacy scale (NGSE) (Chen et al., 2001). The NGSE is a positively worded 8item scale rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree" measuring an individual's belief that they can use their skills and abilities to deal with a situation.

Tolerance of Uncertainty. The Tolerance of Uncertainty Scale Short-Form (α = 0.876) was used to assess an individual's capacity to cope with unforeseen negative events that have a chance of occurring in the future (Carleton et al., 2007). The scale measures both prospective (α = 0.82) and inhibitory anxiety (α = 0.85) both of which are relevant to the present study. There were seven items that measured prospective anxiety which is a fear and anxiety of future events, which included: "One should always look ahead to avoid surprises" and "It frustrates me not having all the information I need'. There were five items that measured inhibitory anxiety which relates to how uncertainty inhibits actions and experiences which included: "Uncertainty keeps me from living a full life" and "When I am uncertain I can't function very well". The items were rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Results

Strength of future self is a predictor of well-being, while strength of past self works indirectly through social isolation.

The means, standard deviations, and correlations of the measures included in this results section are reported in Table 8 below. I tested the model described in the hypotheses and Figure 15 through use of Structural Equation Modelling (SEM) using the AMOS 4.03 statistical package (Arbuckle, 1995 -1999) using maximum likelihood

estimation. Tolerance of uncertainty was included as a control variable (H1a, H2a). The model showed an acceptable fit to the data, χ^2 (3) = 3.84, p = .279, χ^2 ratio = 1.28, RMSEA = .038, CI90 = [.013, .131]; CFI = .997, SRMR = .038. While the upper bound of the RMSEA was greater than 1.0, Kenny, Kaniskan and McCoach (2014) argue that small number of degrees of freedom artificially inflate the RMSEA. As the CFI is greater than 0.90, the χ^2 ratio was lower than 3 and the SRMR is below 0.8 we can conclude that the model has acceptable fit (Hu & Bentler, 2009; Schermelleh-Engel et al., 2003).

In line with hypotheses 1 and 2, strength of future self was positively associated with self-efficacy ($\beta = .35, p < .001$) and well-being ($\beta = .23, p < .001$), and negatively related to social isolation ($\beta = -.32$, p < .001); strength of past self was negatively related to social isolation ($\beta = -.29$, p < .001) and was positively associated with self-efficacy ($\beta = .14$, p = .039). Further, strength of past self had significant indirect effect on mental well-being through social isolation and self-efficacy ($\beta = .13$, p = .010). However, I did not find evidence of an interaction (H3) on psychological well-being, as strength of past self did not moderate the effect of strength of future self ($\beta = -.09$, p = .061). I then examined whether there was an interaction between the SLS variables on markers of psychopathology. The DASS variables were then included. Strength of future self and past selves predicted lower depression (Future: β = -.39, p < .001, Past: $\beta = -.15$, p = .029), stress (Future: $\beta = -.35$, p < .001, Past: $\beta =$ -.19, p = .006) and anxiety (Future: $\beta = -.22, p = .002$, Past: $\beta = -.17, p = .021$). Supporting my hypothesis (H3a), strength of past self moderated the positive impact of strength of future self on both anxiety ($\beta = -.18$, p = .008) and stress ($\beta = -.13$, p = .032), but not for depression (β = -.064, p = .273). The results are depicted graphically in Figures 16 and 17, indicating that as with Study 2.1, when an individual has a strong past self, a strong future self reduces stress and anxiety, while when one has a weak past self, future self did not have a significant effect.

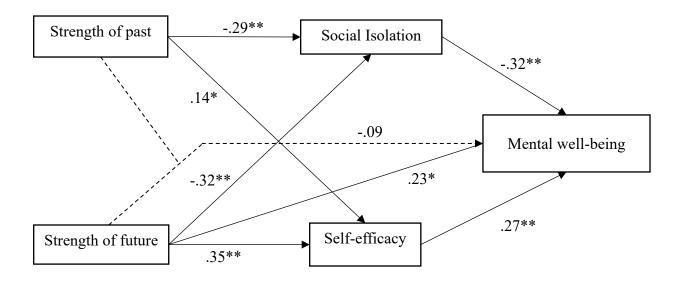


Figure 16: Standardised regression weights for the SLS model. The dashed line indicates the proposed interaction

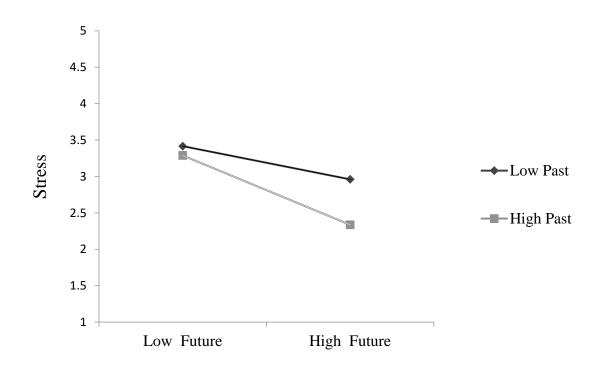


Figure 15: Interaction of strength of future and strength of past identity with stress (DASS)

	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Strength of past self	3.41	.90	-	-	-	-	-	-	-	-	-	-	-	-
2. Strength of future self	3.41	.89	.42**	-	-	-	-	-	-	-	-	-	-	-
3. (Pre-transition) Multiple group memberships	3.74	1.45	-0.21*	.06	-	-	-	-	-	-	-	-	-	-
4. (Post-transition) Group membership maintenance	4.25	1.59	.24**	.44**	.19*	-	-	-	-	-	-	-	-	-
5. Compatibility of social identities	4.66	1.57	.43**	.28**	34**	.16*	-	-	-	-	-	-	-	-
6. (Post-transition) Group membership gain	3.80	1.73	.05	.25**	.39**	.25**	10	-	-	-	-	-	-	-
7. Social Isolation	2.47	0.90	44**	47**	09	32**	20*	29**	-	-	-	-	-	-
8. Self-Efficacy	3.96	0.73	.30**	.42**	.001	.28**	.18*	.16	47**	-	-	-	-	-
9. Mental Well-being	47.54	10.48	.34**	.53**	.21*	.40**	.24**	.39**	59**	.54**	-	-	-	-
10. Depression	6.73	4.35	31**	44**	.029	23**	23*	20*	.55**	50**	64**	-	-	-
11. Anxiety	5.52	5.15	31**	28**	.07	02	27**	.04	.31**	39**	38**	.66**	-	-
12. Stress	4.03	4.19	27**	42**	08	17	35**	05	.42**	41**	59**	.73**	.72**	-

 Table 8: Intercorrelations and descriptive statistics for SEM analysis

Notes. N (227). *p < .05, **p < .001.

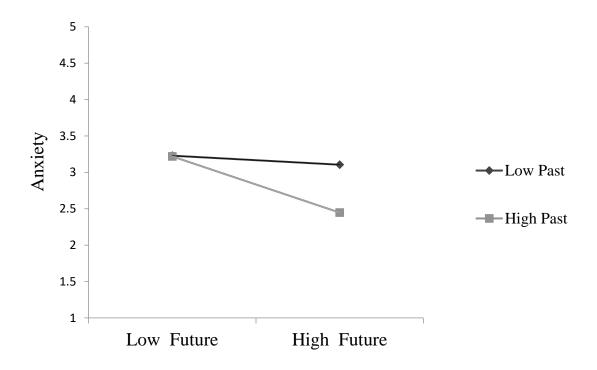


Figure 17: Interaction of strength of future and strength of past identity with anxiety (DASS)

To explore the interaction more deeply, a simple effect analysis was conducted using the procedure by Aiken and West (1991) of transforming the moderator variable up and down by a single standard deviation. The simple effect at a high level of past identity (+1 *SD*) future identity remained impactful, but the relationships to the depression ($\beta = -.32$, p < .001), stress ($\beta = -.23$, p = .008) were weaker while anxiety ($\beta = -.06$, p = .495) was non-significant. At low levels of past identity (-1 *SD*) future identity was of greater importance in reducing symptoms of depression ($\beta = -.45$, p < .001) and stress ($\beta = -.48$, p = .008) but not for anxiety ($\beta = -.39$, p = .495) which was non-significant. This suggests that the extent to which an individual loses their sense of who they were in the past increases their risk of psychological decline as it increases their reliance on their future self. Further, the results also suggest that strength of past self does not detract from transition completion.

Tolerance of uncertainty as a moderator

Having established that the SLS factors are associated with an individual's psychological distress during a transition even when controlling for tolerance of uncertainty, it was then tested as a moderator. I predicted an individual's tolerance of uncertainty would moderate the impact of the SLS factors on mental well-being. Analysis found there was no evidence that tolerance of uncertainty moderated the effect of either strength of future self ($\beta = .005$, p = .933) or past self ($\beta = .091$, p = .134) on well-being. Thus, the hypothesis (H4) that an individual's capacity to tolerate uncertainty would moderate their perception of their past and future was unsupported. Subsequently, I tested whether tolerance of uncertainty moderated the effect of the identity variables on anxiety (Strength of past self: $\beta = .057$, p = .430, Strength of future self: $\beta = .096$, p = .187), stress (Strength of past self: $\beta = -.08$, p = .219, Strength of future self: $\beta = .055$, p = .402), or depression (Strength of past self: $\beta = -.12$, p = .079, Strength of future self: $\beta = .07$, p = .28). Here again the relationships were non-significant, suggesting an individual's tolerance of uncertainty does not moderate the effect of perceiving a loss in past or future self on an individual's well-being during a transition.

Relationship with the Social Identity Model of Identity Change (SIMIC)

In order to understand the role of the SLS factors within the broader SIMIC model, I first established the strength of the predicted pathways. The model depicted in Figure 18 was a poor fit, $\chi 2$ (6) = 49.28, p < .000, $\chi 2$ ratio = .21, RMSEA = .190, CI90 = [.143, .241]; CFI = .717, SRMR = 0.095, the high $\chi 2$ ratio (>3), the RMSEA being above 1.0, the CFI below 0.9 and the SRMR above 0.08 (Hu & Bentler, 2009; Schermelleh-Engel et al., 2003). Covarying error terms for the group membership gain, compatibility, and maintenance variables, and adding a direct pathway from pre-transition group memberships to compatibility improved the fit, $\chi 2$ (2) = 5.01,

 $p = .082, \gamma 2$ ratio = 2.51, RMSEA = .087, CI90 = [.000, .186]; CFI = .98, SRMR = .024, as the SRMR is below 0.08 and the CFI is above 0.9 (Hu & Bentler, 1999). Overall, the model explained 30% of the variance in well-being scores. The results are shown in Figure 18 below and show that compatibility did not moderate the effect of pre-transition group memberships on group membership gain ($\beta = -.058$, p = .29), but did for maintenance ($\beta = -.148$, p = .008). The moderation indicating that as expected, low compatibility weakened the positive relationship between pre-transition group memberships and the number of groups maintained during the transition. Unexpectedly, having multiple social groups before the transition predicted lower group compatibility ($\beta = -.34$, p < .001). However, the relationships were otherwise as predicted by the model, pre-transition group memberships predicted both group membership gain ($\beta = .39$, p < .001) and group membership maintenance ($\beta = .19$, p = .004), but did not have an indirect effect on well-being ($\beta = .11$, p = .064). Group membership gain ($\beta = .34$, p < .001), group membership maintenance ($\beta = .27, p < .001$) and group membership compatibility ($\beta = .23, p$ < .001) were all positively associated with well-being as predicted by the model. Indeed, the relationships of the variables themselves were largely consistent with the predictions of SIMIC.

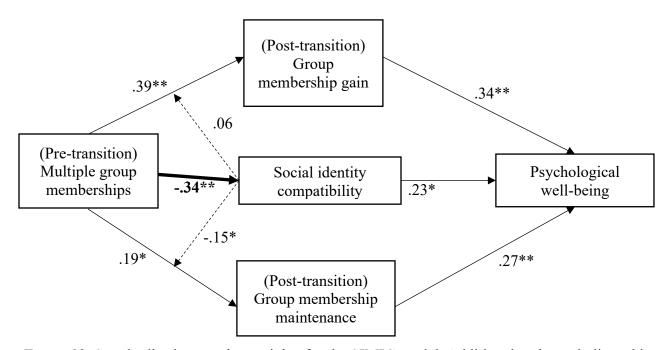


Figure 18: Standardised regression weights for the SIMIC model. Additional pathway indicated in bold.

As the SIMIC model was broadly consistent with the theoretical predictions, the *subjective loss of self* variables were included in the model. Initially the model was a poor fit χ^2 (8) = 47.59, p < .001, χ^2 ratio = 5.949, RMSEA = .158, CI90 = [.116, .202], CFI = .873, SRMR = .073. Modification indices suggested that as in Study 2.2 there was a significant pathway between maintaining group memberships and the strength of one's future self. This pathway was judged theoretically plausible as within the workplace, maintained groups may allow the individual to feel more connected to who they will be in the future. Adding this pathway improved the model fit to a level comparable to the SIMIC model, χ^2 (7) = 17.23, p = .016, χ^2 ratio = 2.46, RMSEA = .08, CI90 = [.035, .138]; CFI = .967, SRMR = .032. Overall, the model depicted in Figure 19 explained 40% of the variance in well-being scores, indicating that the addition of the SLS factors makes a unique contribution to understanding psychological health. The results support the hypothesis (H7) that the compatibility of one's group memberships was

more important in this context as it was associated with strength of past ($\beta = .40, p < .001$) and strength of future ($\beta = .23, p < .001$) selves. In addition, as predicted (H5, H6), group membership gain was positively related to strength of future self ($\beta = .17, p = .005$), and group membership maintenance was positively related to strength of past self ($\beta = .17, p = .008$).

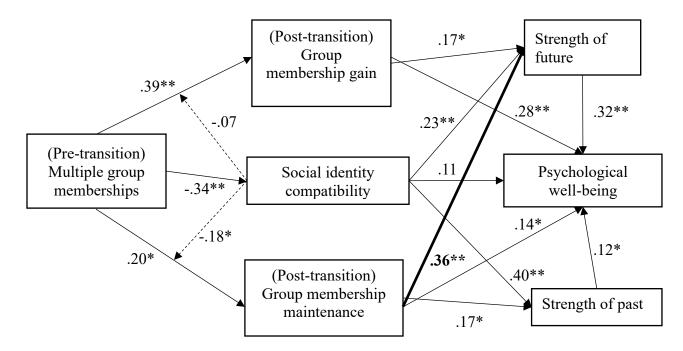


Figure 19: Standardised regression weights for the SIMIC model including the SLS factors. The additional pathway added is highlighted in bold.

Discussion

The results from Study 3 suggest that that *subjective loss of self* (i.e., lack of strength of past and future identity) can be a means of explaining the variance in well-being of employees who are experiencing an organisational transition. Specifically, the weaker past and future selves were strongly associated with negative psychological well-being, self-efficacy and increased social isolation. Strength of past self was shown to be particularly beneficial, reducing the need for an individual to rely on their future identity to avoid developing symptoms of anxiety and

stress. Another important contribution of the present study was the replication of the relationships between the SLS factors with social isolation, self-efficacy, and psychological well-being, whilst also showing that tolerance of uncertainty did not moderate these effects.

In terms of real-world applications, the most relevant finding of the present study was that an individual's sense of strength of past self moderated the degree to which an individual experienced anxiety and stress during a transition, if they had a lost connection to their future self. Indeed, simple effects analysis suggests that the effect may be greater depending on the degree to which one has lost their past self. This finding has implications for transition managers, as the vast majority of perspectives recommend that individuals let go of who they were in order to engage with their future. This finding supports my theory that letting go of one's past self is a risk for those individuals who struggle to, or are initially unable to, build a connection with their future self and then find themselves lost amidst the transition. This study shows that these individuals are more likely to experience stress and anxiety, as well as feel more isolated and less efficacious than their peers. Potentially, transition managers should take a more graduated approach, where more of the individual's role, relationships and structures remain early on in the transition, so they can scaffold the maintenance of their past self while supporting them to develop a future identity. However, it must be noted that this study represents a single timepoint, and that the individual is already experiencing the transition. It is possible, as suggested by Iyer et al. (2009), that maintaining a connection to one's past is not a viable strategy in the long term (p. 709), but this will need to be tested empirically.

Study 3 also contributes to transition research as it validates the measure as an indicator of an individual's *subjective loss of self* during the transition. Further, the results of the study replicated the findings of Chapter 2, as past and future identity demonstrated the relationships to

social isolation, self-efficacy and psychological well-being that were predicted from transition theory. In addition, the results of Study 3 indicated that individuals who lose both their past and future identities had a higher level of stress, depression, and anxiety, which is consistent with the idea that these individuals are in a transitional phase that is closely associated with a risk of resigning or experiencing worsening mental health. These findings are important to both transition managers as well as to the research literature, as it provides empirical evidence substantiating the risks of poorly managed transitions. What remains to be shown, however, is whether the transition itself caused these changes in SLS, as additional factors and explanations cannot be ruled out by the present study.

Further adding to the theoretical relevance of the present study, an individual's tolerance of uncertainty did not moderate the relationship between the SLS factors and well-being, and it did not meaningfully change the results when controlled for. This suggests the scale is not capturing an individual's anxiety around their role or place within their organisation. It also suggests that the anxiety an individual perceives during a transition is more likely to be due to *subjective loss of self* than their inability to tolerate difficult or uncertain situations.

How *subjective loss of self* relates to the Social Identity Model of Identity change is less clear, as the pattern of results differed from Chapter 2 but was more consistent with the original theoretical prediction. It appears that compatibility of group memberships is especially important to the relationship between SIMIC and SLS, and that changes in group memberships do have an effect but the impact on SLS differs depending on the characteristics of the transition. Additionally, the relationship between group membership variables and identity factors appears more complex than was predicted. Within the present study, it was evident that strength of future self was affected by gain, loss, and compatibility of group memberships, while strength of past self was related to compatibility and group membership loss. Potentially, an individual's subjective loss of future self, is influenced by all group membership changes, with the most beneficial outcome occurring for the individual when all three are strong. In contrast, it appears that strength of past self is most strongly linked to the compatibility of these group memberships and the number of groups maintained. As strength of past self appears to be a buffer against psychological decline, this suggests that identifying parallels between who they were and who they are going to become may be advantageous for individuals who have not developed a strong future self. It is also possible that compatibility of group memberships is a better predictor than gains or losses of social groups when the transition is less apparent or occurs simultaneously across large parts of their social network. Potentially, as most employees are adults the strength of past and compatibility finding is a result of these individuals already having stable group memberships that are external to their workplace. For example, in the present study the majority (70%) of the participants reported that they did not lose a single group membership during the merger. Potentially compatibility is more impactful when there are fewer important group membership changes.

Overall, the study provides evidence that *subjective loss of self* can give insight into how an employee is coping with a transition and suggests that one's past identity is a buffer against psychological decline. Additionally, the replication of the scale and findings suggest that there is merit to assessing SLS, and that it may provide a baseline indicator for how the individual is coping with the transition that does not require the individual to have recognised the shifts in their social identities. The theoretical question reinforced by this research is whether *subjective loss of self* can predict mental well-being declines during a transition, or their likelihood of developing new social connections, by looking at its effect over time.

Chapter 4

Understanding how subjective loss of self affects well-being over time

Life transitions are a process of identity reconstruction following a significant change event. As a result, life transitions can be long and difficult and lead to significant declines in psychological well-being as well as an increased perception of social isolation and feeling ineffectual. The previous chapters of this thesis have shown that one's *subjective loss of self* (SLS) provides useful information in explaining the decline in well-being after a transition event. The most significant caveat to the findings thus far is the inability to determine whether perceiving a loss of self following a transition event predicts future declines or improvements in well-being. Consequently, the present chapter takes a longitudinal approach, looking at the changes in group memberships and well-being over time. Study 4.1 examines how a first-year psychology cohort's subjective loss of self across a semester relates to their general well-being and group membership changes. Study 4.2 extends this argument further, including the measure in a survey of a faculty which represents multiple areas of study, to provide evidence for how *subjective loss of self* relates to the health and well-being of university students over time.

Commencing university is associated with declines in well-being

Students commencing university experience disproportionate psychological decline which cannot be entirely explained by individual differences such as age, gender, socioeconomic background amongst others (Stallman & Shochet, 2009). An explanation for the psychological decline is that university is a period in which the individual experiences a life transition. As discussed throughout the thesis, transitional periods are associated with declines in psychological well-being, as well as increases in social isolation. Similarly, commencing university study is regularly and consistently associated with declines in well-being that are in addition to that explained by demographic characteristics (Bewick et al., 2010; Stallman et al., 2017). Further, this decline in well-being is often not recovered by the time the individual completes their degree (Bewick et al., 2010; Stallman, 2010). By looking at beginning university as a transition, we can start to explain this decline in well-being. When entering university, an individual may lose connection to a social identity that previously they were highly integrated into, such as their local high school or a previous job. The loss of this social identity then places their sense of self at risk and also removes their physical access to resources. Part of the ongoing difficulty of improving student well-being may be that the individual is not able to recover a stable perception of themselves over the course of their studies. Additionally, the demands of university place pressure on the individuals previously held social connections, creating uncertainty and destabilising their sense of self (Jetten et al., 2017). Therefore, to understand the degree of vulnerability of an individual, we need to know the degree to which their self-concept has been impacted by shifts in their social identities.

SIMIC and transition related declines in well-being

Understanding the impact of losing social identities during a transition is the premise of the Social Identity Model of Identity Change (SIMIC). The model is underpinned by the Social Identity Approach which argues that our social identities are an essential feature of our selfconcept. The approach is built upon self-categorisation and social identity theory (Tajfel & Turner, 1979; J. C. Turner, 1985), suggesting that our social identities are key components of our overall sense of identity. The more frequently a social identity is salient, the more likely it is to inform our overall sense of self. Consequently a transition that decreases our ability to perceive ourselves as a member of this group (and thus holding the social identity), weakens our sense of identity (Jetten & Pachana, 2012). However, not all losses of group memberships are equal, as the more important an identity is, or the more positively it is perceived, the harder it is to let it go (C. Haslam et al., 2008; Jetten et al., 2002). An inability to let go of a prior social group is seen as a negative effect, as holding onto the lost identity makes it more difficult for the individual to gain new group memberships and in turn build a new stable identity (Jetten & Pachana, 2012). Fundamentally, the model proposes that an individual's risk of psychological decline can be captured through assessment of their social network, such as their pre-transition group memberships, the number of group memberships gained, the number of groups maintained, as well as the compatibility between their gained and maintained group memberships. In simple terms, the more compatible the groups an individual is a part of, the more likely they are to have higher levels of psychological well-being.

SIMIC's premise is substantiated in the literature. C. Haslam et al. (2008) found individuals who maintained more group memberships after having a stroke adjusted better than those who lost group memberships. Similarly, a loss of group memberships is associated with an increased risk of death for retirees, with the greatest risk coming for the individuals who lost the most group memberships (Steffens, Cruwys, et al., 2016). In contrast, gaining group memberships is associated with people feeling more satisfied with their level of self-esteem amongst other positive psychological factors (Greenaway et al., 2016). Being a part of multiple groups prior to the transition was also associated with better well-being, and those with more group memberships were more likely to take on new groups, as well as maintain more of their pre-transition groups (Iyer et al., 2009). Therefore, the link between group membership change (and their linked social identities) and mental health is well-established.

One caveat to the present research is that these studies rely on measuring group membership change. The researchers themselves note that it can be very difficult to capture the

full effect of a particular social group in relation to an individual purely through survey data (Cruwys et al., 2016). Hence, the current best practice approach to mitigate the issue and understand the interplay of an individuals varied group memberships is the Social Identity Mapping (SIM) tool (Cruwys et al., 2016). The tool works by having participants create a network of their group memberships and describing their importance and relationships to each other. Despite its relatively recent development, the tool has already shown utility – indicating that individuals who gained a non-drug taking group membership whilst undertaking drug rehab were less likely to relapse (Best et al., 2016). Further, the tool has been used in Groups 4 Health, a social psychological intervention strategy that has shown promising results in improving mental health (C. Haslam, Cruwys, S. A. Haslam, et al., 2016). While the advantages of the tool are in the broad picture it provides, the clinical expertise required to understand and implement the tool limits its scalability. Currently the researchers are focusing on reducing the issue through development of an online tool (Bentley et al., 2020). SIM's demonstrated efficacy suggests it is worthwhile including in social psychological interventions, but due its scalability may present a barrier for using it with larger samples. Given this dilemma, a measure that does not need to capture the entirety of one's social network, such as the Subjective Loss of Self scale may be better placed to identify those at need of further assistance.

Tracking changes in the self-concept

In this thesis so far, I have shown that assessment of an individual's *subjective loss of self* is linked to their well-being across a number of domains. The present paper, investigates whether we can use *subjective loss of self* to predict an individual's vulnerability for future psychological decline or improvement, based on a loss of connection to their past or future selves. In doing so, *subjective loss of self* becomes a metric by which we can quickly determine the degree to which

an individual's self-concept has been impacted by the transition, as well as how they are likely to fair in the future.

The scale aims to capture the individual's perception of themselves during a transitional period, where the loss of their social identities is affecting their self-concept. While within a transitional period, the loss of their social connections means their identity is uncertain, existing between who they were and who they could be. From qualitative theories on transitions, this period is characterised by a feeling of paralysis, with the individual reluctant relinquish their previous life, whilst also fearful of exploring potential future pathways (Stenner et al., 2017; Thomassen, 2009).

The perception of being trapped or paralysed is consistent with the negative psychological repercussions of being in the transitional space: a decline in psychological wellbeing, as well as a loss of self-efficacy and an increase in perceived social isolation. In Fiol's (2002) paper they recognize that there is a paradox in expecting highly role identified employees to easily adjust to a workplace transition such as a merger, as this redefines a core part of their identity. For these individuals Fiol suggests the significant change event could lead to them perceiving themselves as a novice or lacking the skills to cope with the new environment. Social isolation was also a theme in Little and colleagues (1998) study, where patients who had been recently diagnosed with cancer described themselves as isolated, which was partially due to their perception that no one else would understand their experience. This was mirrored in Strickland and colleagues (2017) study where they found that people diagnosed with multiple sclerosis described themselves as isolated, even when their social groups were largely unchanged. Together, this sense of social isolation and lost efficacy can prevent the individual from successfully progressing through the transition and forming a new stable identity, leaving them

vulnerable to further psychological decline. An example of this can be seen in the work of Hart and Swenty (2016) who found that nursing students who were unable to develop a nurse identity when entering the workforce had increased stress and anxiety. Similarly, Bridges (1986) notes that the loss of role identity that occurs during a workplace transition can lead to disagreements amongst employees and resignations.

Subjective loss of self appears to be a means to provide an estimate of one's vulnerability during a transition. The research presented in this thesis has shown that perceiving a strong connection to one's past has a positive effect on well-being. However, the studies presented till now have not looked at change over time. In the present chapter, the SLS factors are tested longitudinally. In doing so the study hopes to substantiate risk factors for psychological decline during a transition, and also provide evidence as to whether holding onto one's past indeed becomes detrimental over time. Another question for the present chapter, is in understanding how group membership change relates to strength of future self, as well as whether it predicts better well-being in the future.

STUDY 4.1

The aim of Study 4.1 is to demonstrate how a *subjective loss of self* provides a means of assessing vulnerability to psychological decline for a student commencing university. Capturing an individual's group memberships and *subjective loss of self* across three timepoints across a semester at university provides an opportunity to substantiate the role of SLS in well-being declines during transitional periods. I expect a mutually reinforcing relationship whereby a stronger sense of future self is increased by, and increases, group compatibility and engagement with new group memberships overtime. Similarly, strength of past identity is expected to increase and be increased by continued engagement with pre-transition group memberships.

The longitudinal approach also allows testing of a key research question, whether a strong past self impedes the development of a new stable identity or gains in group memberships. It has been suggested that holding onto one's sense of self prior to the transition can only act as a temporary buffer, before becoming detrimental in the long-term (Iyer et al., 2009, p.709). However, so far in this thesis, a strong past has generally shown a positive effect and buffered the individual against decline they had lost connection to their future. In line with previous research, I expect strength of past self at T1 to predict fewer gained group memberships at T2 and T3, compared to those with a weaker sense of past self at T1.

The relationship between a strong sense of one's future identity and their well-being has thus far been shown to be positive and beneficial (Chapter 2 and Chapter 3). In the present study I intend to look at how future identity relates to well-being over time. The presented research in this thesis shows that the SLS variables have a strong relationship to social isolation and selfefficacy as well as psychological well-being. I expect that strength of past identity will be prospectively negatively associated with social isolation and positively associated with selfefficacy. Similarly, strength of future identity will be prospectively negatively associated with social isolation, and positively associated with self-efficacy and mental well-being:

H1: Strength of past identity at T1 will be positively associated with group membership maintenance at T2 and T3, and group membership maintenance at T1 will be positively associated with strength of past self at T2 and T3. Group membership compatibility at T1 is also expected to lead to greater strength of past identity at T2.

H2: Strength of future identity at T1 will be positively associated with group membership gain and maintenance at T2 and T3, and group membership gain at T1 will be positively

associated with strength of future identity at T2 and T3. Group membership compatibility at T1 is also expected to lead to greater strength of future identity at T2.

H3: Strength of past and future identity at T1 will be negatively associated with social isolation and positively associated with self-efficacy at T2 and T3. Strength of future identity at T1 will also be directly associated with the DASS and mental well-being outcome variables at T2 and T3.

H4: Individuals with a strong connection to their past at T1 will have fewer new group memberships at T2 and T3.

H5: It is expected that measures of group membership gain and pre-transition group memberships at T1 will predict better well-being at T2 and T3, while group membership loss at T1 will predict lower well-being at T2 and T3.

Method

Participants

Participants (N= 145) completed the T1 survey in the first three weeks of the semester (84% female, median 19yrs) through the internal student participation portal at an Australian university. Participants received course credit for completing the study. Due to the requirements of the student participation portal, we were unable to increase the size of the initial sample. Of these, 111 participants completed the T2 study five weeks later around mid-semester break (76% of T1), however 7 were unable to be matched to their T1 data due to system issues generating incorrect ID codes. The remaining 104 participants (72% of T1 sample) are the subject of analysis. The participants who remained in the study at T2 (85% female, M = 22, SD = 8.01) were not substantially different to those who completed the T1 survey but not T2 (80% female, M = 21.20, SD = 4.60). At T3 there were 74 responses which was five weeks after T2 and

immediately prior to the exam period (66% of T2), however 24 were unusable due to being incomplete. This led to a compromised T3 sample size of 50 participants.

Comparison of the T3 Sample to T1 and T2

The size of the T3 sample limits its utility in terms of making any claims about changes over time from the present dataset. Indeed, due to the lower numbers it cannot be determined whether there is a true increase in strength of future identity between T1 and T3 (T1 M = 2.90, SD = .35, T3 M = 3.30, SD = 0.52, t(162) = 5.90, p < .001) or a consequence of individual difference in the participants in the sample. Similarly, well-being (T2 M = 45.92, SD = 13.40, T3 = 48.82, SD = 11.34, t(162) = 2.16, p = .032), self-efficacy (T2 M = 3.66, SD = .95, T3 = 3.94, SD= 0.7, t(162) = 1.99, p = .048, and engagement with new groups (T2 M = 3.09, SD = 1.20, T3 = 1.2 3.56, SD = 1.13, t(162) = 2.48, p = .014), significantly improved at T3 compared to T2. As I am unable to rule out sample effects as having contributed to this result, it would be disingenuous to draw conclusions from the T3 sample. It is quite likely that those who completed all three time points accurately are the students who were adjusting more easily to the transition to university rather than those who were struggling. This prevents exploration of the longitudinal relationships as was intended in the design of this study. As the sample size at T3 is well-below acceptability for statistical analysis it will not be the focus of the present paper. No implications nor conclusions can or should be drawn from the T3 data.

Materials

Perceived gain and loss of past and future identity.

The *Subjective Loss of Self* (SLS) scale used in Chapter 3 was adjusted to refer to a university transition rather than a workplace, no other alterations were made to the 8 strength of past identity items (T1 α = 0.84, T2 α = 0.83) and 6 strength of future identity items (T1 α =

0.82, T2 α = 0.86). The 8 past items capture an individual's subjective perception of losing who they were before they began university, example items include "*I am not the same type of person that I was before university*" and "*I am concerned that I am losing (have lost) who I was*". The 6 future focused items assessed the individual's subjective perception of connection of who they were going to be to be after university, sample items include "*I know what I will be doing in the future*" and "*I have a strong sense of who I will be*". The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Identity Compatibility. This was assessed using a single item, "*The identity of a being a university student is compatible with who I was before university*". The item was adapted from Iyer et al. (2009) to be positive, and dropped "*I'm afraid that*" to limit potential confounding with any fear or anxiety around university study. The second compatibility item in Iyer and colleagues' paper was not included as it referred to future expectation around the university experience and the participants in this study had already commenced university. The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Exeter Identity Transition Scales. The EXITS was included to assess the individuals' interaction with both new and old groups across the transition (C. Haslam et al., 2008). The participants' pre-transition group membership interaction was only captured at T1 (α = .89) and included items such as "*Before university I joined in the activities of lots of different groups*". At T1 and T2 the scale captured their engagement with previously held groups since the transition event (T1 α = .86, T2 α = .87) including items such as "*After beginning university I still join in the same group activities as before university*", *as* well as their gain in group memberships (T1 α = .89, T2 α = .89) "*After beginning university I have strong ties with one or more new groups*". The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Psychological Distress. The DASS-21 (Lovibond & Lovibond, 1996) was included to assess the degree of psychopathology within the student population, and to track change across a semester. The scale includes the depression (T1 α = 0.96, T2 α = 0.95), anxiety (T1 α = 0.93, T2 α = 0.92) and stress (T2 α = 0.95, T2 α = 0.95) subscales. Sample items for depression include, *"I felt that life was meaningless"* and *"I felt I wasn't worth much as a person"*, anxiety items included *"I was aware of dryness of my mouth"* and *"I experienced trembling (e.g., in the hands)"*, and stress items included, *"I felt that I was rather touchy"* and *"I felt that I was using a lot of nervous energy"*. About a quarter of the sample met the criteria for moderate or severe depression (cut-off >7, T1 24%, T2 26%) and for moderate or severe anxiety (cut-off >6, T1 27%, T2 27%). Moderate or severe stress was characteristic for a fifth of the sample (cut-off >10, T1 18%, T2 18%). Cut-off scores for the DASS-21 were drawn from the manual produced by the authors of the scale. The questions were rated on a 4-point scale, "Never", "Sometimes", "Often" and "Always".

Psychological Well-being. The general level of psychological well-being (T1 α = 0.93, T2 α = 0.96) was assessed using the Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007). The WEMWBS measures well-being through 14 positively worded items. Scores below 45 indicate that an individual is experiencing poorer well-being than the majority of the population. Examples include *"Ive been thinking clearly"* and *"Ive been feeling relaxed"*. At T1 32% had poorer mental well-being than the general population (compared to the standardization profile), which increased to 46% at T2. The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Social Isolation. The Friendship Scale (Hawthorne, 2006) was used to assess the level of social isolation the individual experienced (T1 α = 0.86, T2 α = 0.84). The scale comprises six

items that were rated on a 5-point scale from "Almost always" to "Not at all" and measures an individual's subjective social isolation over the past four weeks. It consists of negatively worded questions targeting social contact "*I felt isolated from other people*", and positively worded questions on being separate from others "*It has been easy to relate to others*".

Self-efficacy. The New General Self-Efficacy scale (NGSE) was used to assess the level of self-efficacy in the student population (T1 α = 0.92, T2 α = 0.97) (Chen et al., 2001). The NGSE includes 8 items related to an individual's belief in their own ability to work through difficult situations to complete their task. Example items include *"I believe I can succeed at almost any endeavour to which I set my mind"* and *"I am confident that I can perform effectively on many different tasks"*. The scale was rated on a 5-point scale from "Strongly Disagree".

Results

Comparing the results from T1 to T2, indicates that overall well-being, self-efficacy, group membership gain, and group membership maintenance slightly declined from T1 to T2 as shown in Table 9 below. The difference in strength of past self across time was non-significant, whilst strength of future identity increased. Broadly, this suggests that students had lower levels of well-being at T2 compared to T1, which is consistent with university transition literature (Bewick et al., 2010).

Strength of past self does not impair an individual's ability to gain new group memberships

My first hypothesis related to how an individual's subjective connection to their past related to their changes in group membership and their overall well-being. The relationships between the variables were tested using Structural Equation Modelling using AMOS (Arbuckle, 1995 -1999) using maximum likelihood analysis. To test the first hypothesis, I constructed a cross-lagged model as shown in Figure 20 to determine the effect of strength of past self on the measures of group membership gain, and maintenance at T2. The model had good fit $\chi 2$ (7) = 3.98, p = .78, $\chi 2$ ratio = 0.57, RMSEA = .000, CI90 = [.00, .81]; CFI = 1.00, SRMR = .033. As expected, strength of past self at T1 predicted group membership maintenance at T2 (β = .18, p = .016), which suggests that our past self predicted engagement with groups that were linked to who we used to be. However, maintaining groups at T1 did not lead to a stronger past self at T2 (β = .11, p = .16), nor was there a relationship with compatibility at T2 (β = .078, p = .27) or a significant direct effect on well-being at T2 (β = .16, p = .072). Additionally, the fourth hypothesis was not supported as strength of past self at T1 was not significantly related to gaining group memberships at T2 (β = .15, p = .070).

Table 9: Means, standard deviations, correlations across time and mean difference values

	M (T1)	SD (T1)	M (T2)	SD (T2)	r	t	р
Strength of past self	3.46	.75	3.34	.72	.61**	1.78	0.78
Strength of future self	2.90	.35	3.46	.77	.58**	-9.05	<.001**
(Pre-transition) Multiple group memberships	2.79	1.13	-	-	-	-	-
(Post-transition) Group membership maintenance)	3.29	1.04	3.08	1.08	.61**	2.32	.022*
Compatibility of identity	3.56	1.08	3.48	1.06	.44**	.70	.49
(Post-transition) Group membership gain	3.34	1.20	3.10	1.20	.56**	2.30	.024*
Social Isolation	2.44	.86	2.38	.81	.59**	.69	.49
Self-Efficacy	4.02	.63	3.66	.95	.38**	3.89	<.001**
DASS – Depression	1.60	.65	1.66	0.64	.45**	94	.35
DASS – Anxiety	1.54	.58	1.49	.54	.47**	.84	.40
DASS - Stress	1.84	.65	1.84	.69	.60**	14	.89
Psychological Well-being	50.49	10.65	45.92	13.40	.42**	3.53	<.001**

Note: N = 104. For r, ** is <.001. For the mean comparisons, df(103)

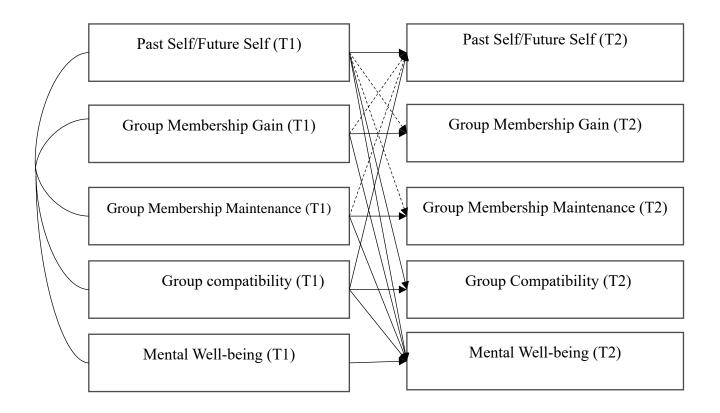


Figure 20: Graphical representation of Cross-lagged Model. The error terms of the T2 variables were covaried. Dashed lines indicate pathways that varied depending on test.

The second hypothesis predicted a strength of future self would be linked to a gain in group memberships at T2. The cross-lagged model showed that future identity at T1 was not significantly related to group membership gain ($\beta = -.14$, p = .088), but a gain in group memberships at T1 did predict strength of future self at T2 ($\beta = .17$, p = .027). Contrary to expectation, strength of future self at T1 was associated with reduced maintenance of their pretransition group memberships at T2 ($\beta = -.16$, p = .028). T1 Compatibility ($\beta = .10$, p = .20) and group maintenance ($\beta = .01$, p = .95) did not predict strength of future self at T2. Based on the present study, it appears that strength of future self at T1 weakens their connection to their

T2. The hypothesis that future identity would be significantly related to well-being was also not supported ($\beta = .02, p = .82$).

Relationship between SLS and transition outcome variables

Following this, a cross-lagged model including the future and past identity factors as well as the outcome variables of social isolation, self-efficacy and DASS factors was assessed to test the third hypothesis. The model showed poor fit at first, with modification indices suggesting a relationship between T1 self-efficacy and T2 strength of future identity ($\beta = .24$, p = .002). Inclusion of these pathways produced a model with good fit $\chi 2$ (16) = 17.44, p = .36, $\chi 2$ ratio = 1.09, RMSEA = .03, CI90 = [.00, .098]; CFI = .998, SRMR = .04. The results did not support the hypothesis, as strength of past self did not have a significant relationship with social isolation ($\beta = .08$, p = .31) or self-efficacy ($\beta = .17$, p = .067) at T2. Similarly, strength of future self did not have a lagged effect on self-efficacy ($\beta = -.07$, p = .47) or social isolation ($\beta = -.03$, p = .67). However, both SLS variables predicted psychopathology at T2, strength of future identity at T1 had a significant negative association with stress ($\beta = -.16$, p = .037), approached significance with depression ($\beta = -.17$, p = .058) but was not significantly related to anxiety ($\beta = -.14$, p= .100). Similarly, strength of past identity at T1 was associated with lower depression ($\beta = -.18$, p = .05) but not anxiety ($\beta = -.07$, p = .41) or stress ($\beta = -.08$, p = .32) at T2.

Group membership changes at T1 do not predict mental well-being at T2

Having looked into the efficacy of the SLS factors in predicting psychopathology, I then explored whether group membership changes related to T2 well-being (H5). A cross-lagged model including pre-transition group memberships, group membership gain, maintenance and compatibility was created. Mental well-being was also included as an outcome variable. The model demonstrated reasonable fit, χ^2 (3) = 2.59, p = .459, χ^2 ratio = 0.86, RMSEA = .000, CI90 = [.000, .157]; CFI = 1.00, SRMR = .02. The results indicated pre-transition group memberships $(\beta = -.053, p = .57)$, group membership gain $(\beta = .12, p = .24)$, maintenance $(\beta = .05, p = .624)$ and compatibility $(\beta = .01, p = .93)$ at T1 did not predict well-being at T2. The results found no significant cross lagged relationships (i.e., no other significant paths between T1 and T2 other than each variable having an association with itself).

Discussion

The main conclusion of the present study is that hanging on to a past identity does not appear to have a detrimental effect on an individual's ability or likelihood of gaining new group memberships as it has been suspected of in much of the transition theory literature. It also indicated that a strong future identity may lead the individual to let go of their previous group memberships more easily, and that the strength of your future self is contributed to by gaining groups and having a high level of self-efficacy in the past. The results also indicated that the SLS variables were associated with reduced psychopathology at T2. Finally, an unexpected finding in the present study was that none of the group membership related factors were implicated in any changes in well-being, depression, stress, or anxiety symptoms across the 6-8 weeks between T1 and T2.

An important contribution of the present study is that it suggests that when an individual has a strong sense of past self they are buffered against psychological decline when they also have a weak future self, as strength of past self at T1 was associated with higher group membership maintenance at T2. The results also indicated that a strong future self at T1 was associated with fewer interactions with previous groups at T2, while a stronger T2 future self was contributed to by self-efficacy at T1. A potential example of this dynamic playing out in practice could be an individual who entered a transition with a strong future self, which led to

them disengaging from their pre-transition groups. If they manage to gain groups and selfefficacy then the strength of their future self increases, leading to better well-being outcomes. However, if they then hit a roadblock and lose connection to their future self, they are more vulnerable to psychological decline unless they were also able to maintain a strong sense of past self. Unfortunately, the loss of the T3 data means the study is unable to determine if this would be a temporary fix, or an adaptive long-term solution. This study thus provides further evidence that a strong past self is beneficial role during transitions, and preliminary evidence that a strong future is related to letting go of one's pre-transition groups.

In terms of psychopathology, the results suggest the SLS variables are associated with lower stress and depression at T2. However, they did not predict psychological well-being at T2. Also contrary to expectations was the lack of relationship of the group membership change variables with any of the outcome variables. One possible explanation is that the loss of the T3 data means the overall timescale was too short for an individual to have felt the impact of losing or gaining group memberships. However, since Iyer et al. (2009) also had a 2 month timescale for one of their studies, this is unlikely to fully explain the result. Although if there is a delayed impact for group membership changes, it speaks to the utility of the SLS scale, as it can identify those individuals who are at risk of psychopathology, before the individual has recognised the changes to their group memberships.

While these contributions to the research are important, it is necessary to consider that the study involved a sample of primarily young, female, and local students. In terms of group membership changes, these students are less likely than country or international students to have had to alter their routine substantially in the transition to university. The study also lost T3 due to attrition, further limiting is explanatory power and generalisability. Consequently, the results of

this study should be considered as representing a transition in progress, rather than looking at the T2 results as being at the completion of the transition. Given that the majority of these students are unlikely to have experienced a significant disruption to their lives given the normative nature of university entry in Australia, including a measure that assesses the relative importance of the lost or remaining groups could be a useful measure for future studies.

Overall, the results of the study support the theoretical themes of this thesis. Specifically, strength of past self does not appear to negatively affect well-being and may support maintenance of pre-transition groups. Similarly, strength of future self appears to be an indication of both psychological health and that the individual is coping well with the transition. In addition, the results demonstrate a premise presented by a number of researchers, that a strong future is associated with letting go of previous group memberships. While this study does not determine whether it is necessary, this may explain the vulnerability of some individuals to psychological decline during the period.

STUDY 4.2

The small sample size in Study 4.1, as well as the homogenous sample highlighted the need to provide further longitudinal evidence to support the conclusions drawn. In order to ascertain what predictive capability, if any, the identity factors held, the Subjective Loss of Self (SLS) measure was included in a faculty wide survey at an Australian University. The study was run by researchers at the South Australian Health and Medical Research Institute (SAHMRI), who have published some of the results relating to the general level of distress, well-being and resilience at T1 (van Agteren et al., 2019). In the present study, I use the collated T1 and T2 data using matched participants to explore how changes in subjective identity over time predict well-being at T2.

There were no measures of group membership change included in the study, so the relationship with group membership was not able to be analysed. The primary function of this study is to examine whether subjective loss of self has an association with psychopathology and social identity strength over time. In doing so it provides evidence of the utility of the SLS as a screening tool for organisations to identify individuals at risk of becoming lost in the transition.

The study was designed by SAHMRI to provide a broad picture of the mental health across the College, as well as an indication of the general level of resilience, well-being, and psychopathology in the student population. The inclusion of the Subjective Loss of Self (SLS) scale provided a means of assessing how perceived changes to identity related to their level of well-being and their resilience.

H1: It was expected that strength of past self at T1 would be associated with higher resilience at T2.

H2: It was expected that strength of future self at T1 would be associated with their level of social well-being, generalized level of well-being at T2.

H3: It was expected that as general satisfaction with life involves reflection on their current life status, that strength of past self at T1 would be associated with their level of general satisfaction with life at T2.

H4: An interaction was predicted whereby individuals who had lost connection to both their past selves and future selves at T1 were expected to be more likely to experience burnout at T2.

H5: As found in Study 4.1, It was expected that strength of past self at T1 would be associated with reduced depression at T2 while strength of future self at T1 would be associated with reduced stress at T2.

Method

Participants

The participants in the present study were first contacted between March and April of 2019 which is the beginning of the first semester, where all of the students in the College of Education, Psychology and Social Work at an Australian university were invited to complete the T1 survey (n = 5791). The invitations were sent out through newsletters, direct email, announced in lectures and supported by promotion from academic staff. The response window at T1 was 3 weeks long, and during this period 905 participants (16%) completed the survey. The survey was again emailed out to the entire cohort in the months of August to September of 2019, which is the beginning of the second semester, and again had a 3-week window for completion. At T2, 565 participants completed the survey (10%). The results were cleaned and ID's matched by SAHMRI researchers before for the current analysis.

Comparison of non-matched with matched pairs

Overall, there were 700 participants who only completed the T1 survey, 359 participants who only completed T2, and 202 matched pairs. The participants who completed both timepoints (M = 25.66, SD = 8.30) trended slightly younger than the age profile at T1 (M = 27.58, SD = 9.77, t(902) = 2.556, p = 0.01, d = 0.21) and T2 (M = 28.68, SD = 9.76, t(562) = 3.728, p < .001, d = 0.33) although the effect sizes were small. Further, there was also a strong gender bias across the entire sample (T1 = 83% female, T2 = 81% female, matched pairs = 88% female). The student background was comparable across the sample, with the majority of students living in postcode areas with a typical socio-economic profile for Australia (T1 = 87%, T2 = 78%, matched pairs = 86%), there was also a similar degree of disability across the three samples (T1 = 11%, T2 = 9%, matched pairs = 12%). While there are slight differences in the participant

profiles across the timepoints, the groups are largely similar and not expected to significantly alter the results. For the purposes of this thesis, I will be focusing on the 202 matched pairs, as their results allow analysis of change over time.

Materials

Subjective Loss of Self scale.

The measure included in the present study was identical to the scale completed in Study 4.1. The measure showed acceptable reliability (Strength of past identity T1 α = 0.75, T2 α = 0.79; strength of future identity T1 α = 0.88, T2 α = 0.83). The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Psychological Distress. The DASS-21 (Lovibond & Lovibond, 1996) was included in the present study, and had good reliability (Depression T1 α = 0.96, T2 α = 0.95), anxiety T1 α = 0.93, T2 α = 0.92), stress T1 α = 0.95, T2 α = 0.95). A significant portion of the sample met the criteria for psychopathology. Specifically, at T1 37% met the criteria for moderate or severe depression, increasing to 40% at T2. While 36% met the criteria for moderate or severe anxiety, and 31% met the criteria for moderate or severe stress at both timepoints. The questions were rated on a 4-point scale, "Never", "Sometimes", "Often" and "Always".

Mental Well-being. Mental well-being was assessed through use of the Mental Health Continuum short form (MHC-SF) (Keyes, 2002; Lamers et al., 2011). The scale comprised three subscales, each targeting components of overall well-being. There were three items that measure emotional well-being, and aim to target the degree to which the individual is happy or interested in their life, for example "During the past month, how often did you feel satisfied with life", there are six items that represent psychological well-being, for example "During the past month, how often did you feel that you liked most parts of your personality", and five items that target social well-being, for example "During the past month, how often did you feel that you had warm and trusting relationships with others". The total score is computed to provide a representation of the individuals overall level of social, emotional, and psychological well-being. The internal reliability of the total 14-item scale was strong (T1 α = .92). The scale was rated on a 6-point frequency scale from "Never" to "Every day".

Satisfaction with life. The Satisfaction with Life Scale ($\alpha = .82$) was also included in this survey to target the individual global life satisfaction without being influenced by loneliness or optimism (Diener et al., 1985). The scale includes five items such as "*The conditions of my life are excellent*" and "*If I could live my life over, I would change almost nothing*". The scale was rated on a 7-point scale from "Strongly Agree" to "Strongly Disagree".

Resilience. An individual's capacity to bounce back from significant life stressors was captured by the Brief Resilience Scale (T1 α = .84) (Smith et al., 2008). The scale includes six items such as *"It does not take me long to recover from a stressful event"* and *"It is hard for me to snap back when something bad happens (Reverse coded)"*. The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Burnout. The degree to which the student population experienced emotional exhaustion, depersonalization and a lack of purpose in their work was captured by a single item (Schmoldt et al., 1994). The measure asks "Overall, based on your definition of burnout, how would you rate your level of burnout?", where the responses are: (1) "I enjoy my work. I have no symptoms of burnout", (2) "Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out", (3) "I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion", (4) "The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot" and (5) "I

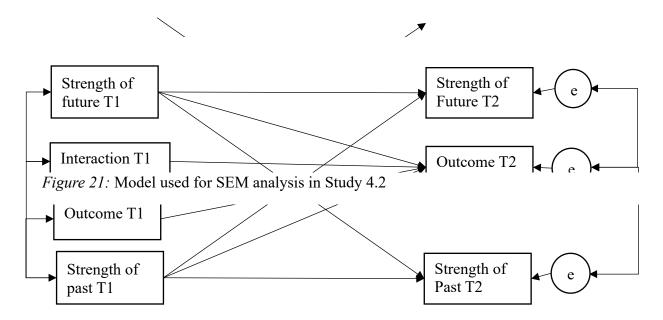
feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help". This single item measure has shown to be a viable alternative to the proprietary Maslach Burnout Inventory (MBI), as well as its derivative MBI:Emotional Exhaustion and MBI:Depersonalisation single item measures (Dolan et al., 2015). At T1 32% had moderate symptoms, while 20% had a high or severe indication of burnout. At T2 37% had moderate symptoms, while 17% had a high or severe indication.

Additional Measures

The survey also included measures of workplace well-being, physical activity, physical health, nutrition, sleep, and employability – however these are outside the scope of the present analysis.

Results

The analysis of results was through SEM analysis using AMOS 4.3 (Arbuckle) as in Study 4.1. The results were analysed through cross lagging the T1 variables to look at the effect on the outcome variable at T2 as demonstrated in Figure 21. The descriptive statistics are presented in Table 10.



	M (T1)	SD (T1)	M (T2)	SD (T2)	r	t	р
Strength of past self	4.79	1.02	4.56	1.06	.57**	3.42	<.001**
Strength of future self	4.34	1.30	4.31	1.18	.67**	.41	.68
Depression	13.14	9.83	14.40	10.73	.58**	-1.90	.059
Stress	16.90	9.06	17.07	9.34	.60**	29	.77
Anxiety	11.64	9.07	11.32	9.50	.66**	.61	.54
Resilience	3.02	.80	2.99	.79	.69**	.68	.50
Social well-being	13.04	5.07	12.43	5.12	.56**	2.10	.037*
Emotional well-being	9.64	2.91	9.24	3.12	.58**	2.10	.040*
Psychological Well-being	18.47	6.10	17.95	6.61	.66**	1.39	.166
General well-being	41.14	12.65	39.61	13.58	.70**	2.13	.034*
Burnout	2.65	.99	2.64	.96	.42**	.08	.93
Life satisfaction	20.50	6.45	20.06	6.59	.69**	1.23	.22

Table 10. Moons	standard deviations,	correlations	and moan	difforonco	within a	wariable over time
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Note. **p* <.05, ***p* <.001. N = 202 (*df* = 201)

Strength of past self moderates the effect of future on resilience overtime

The first hypothesis related to the level of resilience of an individual at T2 being associated with the strength of one's past self at T1. To test this hypothesis resilience was entered into the described model as the outcome variables. The model was a good fit for the data $\chi 2$ (2) = 0.773, p = .680, $\chi 2$ ratio = .386 RMSEA = .000, CI90 = [.000, .106]; CFI = 1.00, SRMR =.009. As the CFI is greater than 0.90, the $\chi 2$ ratio is acceptable (<2) and the SRMR is below 0.08 the model has good fit. Overall, the model predicted 44% of the variance in resilience scores at T2. The result did not support the hypotheses as strength of past self did not have a significant direct relationship to resilience ($\beta = .06$, p = .309), nor did strength of future self ($\beta = .02$, p = .739). However, the results did show a significant interaction between strength of past and future selves on resilience as shown in Figure 22 ($\beta = .11$, p = .049). While the effect is weak, it suggests an individual is more likely to be resilient if they have both a strong connection to their future and past.

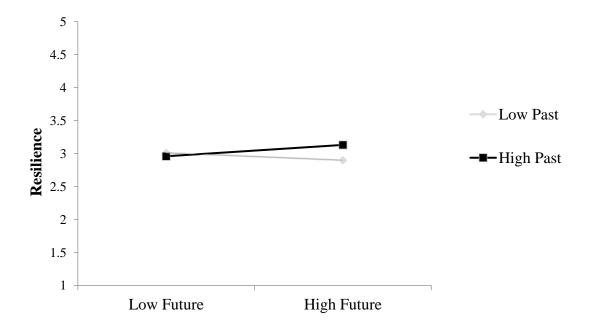


Figure 22: Interaction of strength of future and strength of past identity with resilience

Well-being and life satisfaction is linked to an individual's future identity

The second hypothesis related to an individual's social well-being and general wellbeing. Social well-being was measured using items referring to their perception that they belong to and fit into society in general. I predicted that this would be associated with their strength of future self as this reflects a growing sense of connection to their new environment. Social wellbeing was entered into the model in place of the outcome variable in Figure 21. The model was a good fit for the data χ^2 (3) = 0.803, p = .849, χ^2 ratio = .268 RMSEA = .000, CI90 = [.000, .066]; CFI = 1.00, SRMR =.009. The results supported part of my second hypothesis as future identity at T1 predicted social well-being at T2 ($\beta = .15$, p = .008). There was not a significant direct effect for strength of past self ($\beta = .06$, p = .271) nor evidence of an interaction between strength of past and future selves ($\beta = .02$, p = .741). Overall, the model predicted 46% of the variance in social well-being scores at T2. I then analysed general well-being across the transition, which was predicted to be associated with strength of future self. The model was again a good fit, χ^2 (4) = 1.19, p = .880, χ^2 ratio = .0297, RMSEA = .000, CI90 = [.000, .052]; CFI = 0.998, SRMR = .0114. The result also supported my hypothesis, strength of future self at T1 significantly predicted total well-being at T2 ($\beta = .150$, p = .007), however strength of past self $(\beta = .086, p = .096)$ did not, nor was there a significant interaction $(\beta = .046, p = .224)$.

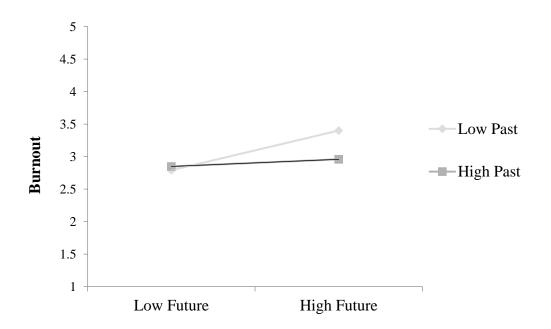
The third hypothesis was that life satisfaction over time would be linked to an individual's strength of past identity. The model was a good fit for the data, χ^2 (4) = 1.60, p = .809, χ^2 ratio = .809, RMSEA = .000, CI90 = [.000, .066]; CFI = 1.00, SRMR = .0134. The result supported my hypothesis as strength of past identity at T1 significantly predicted life satisfaction at T2 (β = .106, p = .043), while strength of future self (β = .10, p = .067) and the interaction term were non-significant (β = -.016, p = .679).

Burnout at T2

The fourth hypothesis for this study related to student likelihood of burnout over time. I predicted that individuals who experienced a subjective loss of both past and future identity would experience the highest likelihood of burnout, however this was not the case. Neither past identity ($\beta = .097$, p = .237) nor future identity ($\beta = .018$, p = .823) at T1 had a significant direct effect on burnout at T2. However, there was an interaction that approached significance ($\beta = .144$, p = .061) as seen in Figure 23. In sum, the findings did not support the hypothesis as neither of the SLS variables had a relationship with symptoms of burnout.

Risk of Psychopathology

The fifth hypothesis related to an individual's likelihood of experiencing psychopathology, as was seen in Study 4.1. An individual's likelihood of experiencing stress, depression, or anxiety in at T2 was predicted by their SLS factors at T1. To account for shared



variance, the three measures included in the DASS were entered simultaneously and cross-

lagged. The model was a good fit for the data χ^2 (12) = 13.68, p = .322, χ^2 ratio = 1.14, RMSEA *Figure 23:* Interaction of strength of future and strength of past identity with

= .026, CI90 = [.000, .075]; CFI = 0.998, SRMR =.022. The model accounted for around a third of the variance in each of the outcome variables of depression (35%), anxiety (42%) and stress (35%). In terms of their predictive capacity, Past identity at T1 predicted lower levels of anxiety at T2 (β = -.12, p = .041) but was not associated with depression (β = -.06, p = .32) or stress (β = -.10, p = .076), whilst future at T1 was associated with lower levels of depression at T2 (β = -.18, p = .004) but not anxiety (β = -.03, p = .53) or stress (β = -.04, p = .55). Consequently, the specific relationships between the SLS variables and the DASS outcome variables differs from the findings of Study 4.1, limiting the strength of the present conclusions.

Discussion

The most important finding of the present study is that past identity was again found to have an association with reduced psychopathology as well as with greater life satisfaction. Additionally, future identity was associated with social well-being, suggesting that one's future identity is linked to one's degree of social connectedness in their new environment. While caution should be taken in their interpretation, the interactions demonstrate a similar pattern to the results shown thus far in this thesis, where the loss of one's past appears to lead to more negative outcomes. Overall, this study suggests that the SLS scale can provide useful information about an individual's vulnerability to psychopathology throughout a transition.

The results of the present study show that having a strong past and future identity at T1 was associated with lower psychopathology at T2 using the DASS indicators. However, the pattern was different to that of Study 4.1. Based on the current findings it is unclear whether this is a consequence of the sample, methodological issues with Study 4.1 or represents an issue with the scale. Generally, the reduction in psychopathology associated with SLS aligns with the theoretical prediction of this thesis: Losing one's past is not necessary but that individuals do

best when they have high levels of both past and future identity. One potential explanation is that the different pattern of results between the studies is why transitions are so difficult even when desired. If an individual embraces their future identity to the exclusion of the past, it is possible that this level of investment puts a greater level of pressure on it to succeed, increasing their risk of psychopathology. Future research into transition management could look at this dynamic more closely, as reminding individuals to maintain their past self and group memberships may provide a means to mitigate some of the negative consequences.

A key limitation in looking at the results of this study was the inability to include measures of group membership change. Group membership changes (and their linked social identities) represents a key component of the model and may have led to an overestimation of the significance of the SLS variables as the impact of group memberships could not be controlled for. This limits the implications that can be drawn from the present study.

Again, a key limitation of the present study is that the participants in this study are predominately female undergraduate students, completing their first year at university. While this is a typical sample profile for research conducted on university campuses, it does limit the broader generalizability of the study. An additional consideration is that the two timepoint nature of the study means that it is necessary to be cautious about drawing causal relationships from the results. As such I cannot be certain that subjective loss of self caused the changes in the other variables, as SLS may instead be consequential to them. Whilst limitations are noted, the study's main conclusion, that the SLS factors are beneficial during a transition through different mechanisms, is of value to future research and practice.

General Discussion

The results of the studies presented in this chapter largely align with the theoretical background of transition theory, as well as with the argument of this thesis. Foremost, strength of past self was shown across both studies to have a beneficial effect, and to even act as a buffer against psychological decline in certain circumstances. Additionally, both studies suggested that the loss of one's past self was a marker of vulnerability to psychological decline. Similarly, strength of future self was again shown to have a beneficial impact on well-being and to be associated with a reduction in psychopathology. Study 4.1 also provided evidence suggesting that a strong future identity was associated with a lower number of group memberships maintained at T2, and that a gain in group memberships at T1 strengthened their perceived future self at T2. This substantiates the claim that a strong future identity either causes, or is caused by, them moving away from their pre-transition group memberships. However, as shown thus far in the thesis, the loss of contact with previous group memberships, does not necessitate the individual losing this part of their past identity. Indeed, the results presented thus far suggest the individual is likely to see a benefit in maintaining a strong connection to their past self.

The most meaningful finding of the present study is that the SLS scale has demonstrated its utility in predicting psychopathology and psychological well-being over time. This is an important finding as it suggests that these variables can be used to provide a broad indication of those individuals who are most vulnerable during the transition. Indeed, both Study 4.1 and 4.2 highlighted the risk to individuals who are low on both past and future self, in terms of increased psychopathology. This aligns with the core theme of the present thesis, that one's perception of their identity is a meaningful means of assessing how an individual is coping with a transition.

The results also suggest that experiencing a *subjective loss of past and future selves* places an individual at the highest risk of developing psychopathology. This research also demonstrates that the subjectivity of the transition experience is key in understanding the implications for wellbeing. Indeed, it appears that how individuals appraise their sense of identity is potentially more relevant to their overall well-being than their reported changes in group memberships. Further, the SLS scale may also have a role as a simple measure that can assess how a population is coping with the demands of a significant transition.

Less clear, is the role of and for group memberships in connection with *subjective loss of self*. In Study 4.1 there were no significant associations between the measures of group membership interaction at T1 with the SLS variables nor the various measures of psychological health at T2. This finding is inconsistent with the research literature, which has repeatedly found that group membership changes are predictive of better mental health at later time points. Potentially, the timescale of Study 4.1 was too short for an individual to recognize their new group memberships, or they may not have yet seen these group memberships as meaningful, and thus not reported them. Study 4.2, which lacked a direct measure of group membership, was unable to clarify this point but did find that strength of future self was associated with the social well-being measure which represented having a diverse and connected social identity.

In terms of transition theory more broadly, the results of the included studies show that a strong past self is not detrimental to the individual, and it does not appear to detract from their ability to progress through the transition. In contrast, a strong past self was associated with better satisfaction with life and lower psychopathology, although whether it can provide a buffer for the individual against psychological decline when one's future self is lost remains mixed. At this stage, it appears that the individuals who lose connection to their past self are the ones who have

the greatest risk of distress. Unfortunately, the loss of the T3 timepoint in Study 4.1 means that it remains unclear as to whether a strong past self does eventually weaken one's future self or reduce the likelihood of the individual gaining new group memberships. Future research should test the prediction made by multiple researchers that a connection to one's past can impede the transition and leave them 'stuck' and unable to move on from who they were, as suggested by Louis (1980) and Oswald and Clark (2003). From the present findings, it is at least clear that a strong subjective connection to one's past does not appear to interfere with well-being or group membership changes over the 2-3 month period upon commencing university and appears to be beneficial to their psychological health.

Future self, as expected, remains a key marker of transition success with the studies finding consistent relationships between it and well-being. This suggests that a strong future self is beneficial to moving towards the end of a transition. However, it appears that an all or nothing approach to the future leaves an individual vulnerable, as they increasingly lose connection to their previous group memberships, without necessarily being likely to gain more. This is an important research contribution as it emphasizes the need for the individual to build or be scaffolded to build social relationships in their new environment, even if they are feeling comfortable with their future direction. Additionally, as strength of future self was not negatively impacted by strength of past self, it suggests there is no intrinsic need to let go of one's past in order to successfully navigate the transition.

Limitations and future directions

While there are some useful conclusions to be drawn from the present studies, it cannot be overlooked that there was substantial variation in the pattern of results. It is unclear why the measure of mental well-being included in Study 4.1 were not predicted by the SLS variables at

T2, but psychopathology was. Similarly, the inability to include group identification measures in Study 4.2 limits its explanatory power in terms of the relationship between SLS and SIMIC. Given the lack of lagged effects of group membership on psychopathology and well-being in Study 4.1, this presents a notable barrier to the conclusions of this Chapter. Potentially, the difficulty with establishing the impact of group membership on one's perception of themselves is a result of its complexity as a variable, and thus difficulty in being used as a measure. If so, it suggests that utilizing SLS as a screener before utilizing the Social Identity Mapping tool (Cruwys et al., 2016) could be a beneficial application for social psychological interventions.

A significant limitation of the present study was the loss of the T3 sample in Study 4.1. This reduced the strength of the conclusions around causality and limits the generalizability of the study. This remains a question for future research as there is a need to clearly determine the process by which this identity loss or gain occurs, and whether it can be influenced by interventions or structural supports during the transition.

Another important component to be addressed in a future study is how the *importance* of the group membership that has been lost moderates the extent to which an individual feels a *subjective loss of self*. The findings of multiple researchers highlight that having multiple important and compatible group memberships leads to better health and psychological outcomes (C. Haslam et al., 2008; C. Haslam, Steffens, et al., 2019; Iyer et al., 2009). It is however hard to quantify the degree to which any social identity is important to an individual, as its significance to the individual can vary depending on its context. From the life transition literature, it is expected that the more the individual relied upon a particular identity to provide their sense of self, the more likely they are to be lost in the 'transition': a loss of contact to who they were, as well as who they could be. Consequently, it may be that in very significant transitions such as the

loss of one's partner, a strong past self prevents them from completing the transition or causes a loss of connection with their future self, leaving them trapped in the transition. By investigating how SLS functions when an individual loses a particularly close social group, this study could also determine whether the theorised *liminal hotspot*, a prolonged transition characterised by greater distress and poorer outcomes that exists indefinitely (Stenner et al., 2017; Szakolczai, 2017), can be measured.

What can be drawn from the empirical investigations of this Chapter is that an individual's connection to their past and future is an important feature in understanding an individual's vulnerability to psychological decline as they progress through a life transition. That group memberships are also important is clear, however it is less certain how they specifically relate to a *subjective loss of self*. There also remain questions around whether strength of past self becomes a detriment over time for individuals who have lost a very important group membership.

Understanding how the loss of an important group membership impacts on the transition self-concept.

Chapter 5

Understanding how the loss of an important group membership impacts on the transition self-concept.

The loss of a loved one whether by death or the dissolution of the relationship, can be one of the most significant events in an individual's life. Indeed it is well established that the loss of a partner can substantially disrupt an individual's life, impacting their mental health and/or leading to post-traumatic growth (Qasim & Carson, 2020; Waugh et al., 2018). This disruption causes the individual to enter into an acute grief period which can have significant long-term consequences in terms of the development of psychopathology (Whisman et al., 2022). Papa and Lancaster (2016) also describe how grief creates a period of high stress and instability, requiring a prolonged adjustment period where the individual needs to make sense of their world again. These findings suggest that the loss of a partner is a particularly meaningful transition, impacting on an individual's social connections (Maciejewski et al., 2022) and psychological well-being (Whisman et al., 2022). In this chapter I investigate whether *subjective loss of self* (SLS) can provide insight into which individuals are more vulnerable to a prolonged transition, as well as understand how an individual is adjusting to their new reality.

A transition of this magnitude also allows quantitative examination of a key area of qualitative transition theory – the liminal hotspot. The idea behind a liminal hotspot is that it represents a stalled transition, where the individual feels unable to re-join their past life, but is also unwilling to move forward into their future (Stenner et al., 2017) Within a liminal hotspot the individual feels trapped and uncertain, with this experience continuing indefinitely – ending only when the individual has regained stability over their sense of self (Greco & Stenner, 2017). By looking at people who have experienced loss of their significant other, this study will explore

whether *subjective loss of self* is a contributor to the individual becoming trapped in a liminal hotspot. Specifically, this chapter will examine whether subjective loss of past and future selves is associated with the importance of the lost relationship and in turn if this contributes to an inability to adjustment to the new reality.

Loss of identity during grief following death or dissolution of a relationship

Transition research encompasses the experience of death and loss, including it as an event that is often the instigator of a life transition. It follows that the loss of the loved one is accompanied by the individual losing connection to who they were and were going to be. Consider a young person looking forward to marriage with their fiancé. If through chance or circumstance this relationship ends, both individuals will be required to reconstitute their sense of self without the social identity provided by their partner. Given the significance of this loss, it is possible that the individuals struggle to even remember who they were before their partner, while they have also lost their perceived future. In this scenario and others like it, it would not be unsurprising for the individual to experience significant distress until they are able to regain stability in who they see themselves to be. From the research, we expect that these individuals are likely to isolate themselves from social connections, or be resistant to gaining new group memberships as is seen in other life transitions (Little et al., 1998; Meleis et al., 2000) as they are unwilling to 'move on' from their lost loved one. The experience of grief varies from person to person, with most major symptoms reducing in frequency over the following year (O'Connor, 2019). However, while theories of grief emphasize the connection to the individual who has been lost, there has been comparatively little work understanding how an individual perceives the change to their own identity (Papa & Lancaster, 2016). Recently, Papa and Lancaster (2016) surveyed participants using Amazon Mechanical Turk (MTurk) on their level of grief as well as

the number and importance of identities that they held. The researchers found individuals who had stronger personal or social identities had lower grief severity, emphasizing the importance of identity to managing well-being.

While the types of relationship loss vary considerably, from a difficult divorce or separation to an amicable parting, to the finality of death, there is overlap in how we measure the level of distress. As noted throughout the thesis, when a change event, is not of sufficient magnitude to disrupt an important social identity, it does not result in a life transition. Thus, within the present thesis, we would expect those who had more amicable or easier transitions to have coped well since the loss of their partner and be an appropriate comparison group for those whose transitions impacted more greatly on their sense of self.

Transitional periods

As discussed, the finality of a death is very likely to move an individual into a period of transition. Whether described as a 'neutral zone', 'liminal period' or 'chaos phase' (Banmen, 2002; Bridges, 1986; V. Turner, 1969), the characteristics are largely consistent: psychological decline, but also the potential for personal growth. What determines whether an individual can successfully navigate this stage is less certain, with autonomy, mastery and social connections all suggested as indicators of a completed transition (Bridges, 1986; Little et al., 1998; Schumacher & Meleis, 1994; Stenner et al., 2017; Thomassen, 2009).

Whether the individual should hold onto their past self is less certain, with many researchers contending that holding onto who they were blocks the individual from engaging with their future (Bridges, 1986; Conroy & O'leary-Kelly, 2014; Greco & Stenner, 2017; Oswald & Clark, 2003; Szakolczai, 2017). Further it is suggested that that holding onto one's past contributes to the psychological decline of the period as the individual is unable to integrate their

past and future identities (Dien, 2000; Little et al., 1998). In this thesis so far, the findings suggest that a strong past self does not reduce well-being or reduce group membership gains. The present study will test whether maintaining a connection to one's past self becomes detrimental over time after experiencing a significant loss or contribute to an unending transition.

Understanding the importance of the transition to the individual

The loss of a loved one (by death or relationship breakdown), threatens an individual's self-concept as it destabilizes personal or social identities by which the individual defined themselves. The degree to which this loss affects their sense of self, is therefore related to their reliance on the identity (Epstein, 1973). This has been demonstrated empirically by Slotter, Winger and Soto's (2015) paper that found the self-concept of individual's who imagined they were no longer allowed to be a member of their chosen group was more greatly reduced the more highly they identified with it. The idea that the more important the identity is, the greater the distress is not new. Already Freud recognised that grieving reflected an individual having lost someone who was important to how they saw themselves (Freud, 1954; Papa & Lancaster, 2016). However, work in the grief and resilience literature suggests that the experience of loss itself may not be the whole story. Bonanno, Papa and O'Neill's (2001) meta-analysis found that it is not guaranteed that an individual will experience a decline in their well-being and overall level of functioning after losing someone close to them. Instead, they suggest that the defining factor is an individual's capacity to maintain a sense of continuity in who they are throughout the transition. Thus, individuals who do not experience a subjective loss of self, would be expected to manage this transition more readily.

Consequently, it is not the loss of the individual that causes ongoing distress, but instead it is how this loss affects an individual's perception of themselves. For example, Papa and

Lancaster's (2016) paper included a measure of identity disruption in their paper on grief, asking participants to write a response to the question "Describe how your roles, identity, and or self have changed since the loss" (p.52). The results support the argument above as individuals who wrote responses indicating confusion or disengagement had greater levels of grief than those who did not. Similarly, Smeekes, Verkuyten, Çelebi, Acartürk and Onkun (2017) found that the negative impact on life satisfaction from becoming a refugee was mitigated for those individuals who were able to maintain continuity in some of their social identities. Further, those that were members of more groups before the transition had a higher risk of depression, suggesting that both the number and importance of these lost groups, affected their self-perception. Hence, the degree to which an individual experiences decline in their well-being after the loss of a loved one, directly relates to their perception of their identity.

These findings align with the Social Identity Model of Identity Change (SIMIC) as it reaffirms that our social identities (and therefore our sense of self) are informed by our group memberships. Further, we know that the groups we interact with more frequently are more salient, and thus impactful when lost. Within the present study, it is likely that for some individuals the transition event occurred sometime in the past and, therefore, the impact of the losses of group memberships that occurred may be less salient than they would have been at the time of the loss. This study will explore whether losing an important group membership is related to the length and difficulty of the transition.

The conception of important life transitions involving grief and loss as being a consequence of changes to one's perception of themselves (as a result of changes in their social identities) suggests the SLS scale is especially suited to this population. Based on the previous research in this thesis, the scale should be able to identify the individuals who have stalled in

their transition, as well as those who can more readily adjust to the loss and regain stability over their identity. Further, it allows a deeper investigation as to whether strength of past self is a limiting factor, as it may be that holding onto who you were prior to the loss prevents you from ever moving on, and leaves you trapped in the transitional phase.

Prolonged transitions

An additional research question to explore is the idea of an unending transitional phase. Promoted in liminal theory, a liminal hotspot is an explanation for the cases where an individual never feels they have regained stability over their identity following a transition (Greco & Stenner, 2017). The liminal hotspot is characterised by significant uncertainty, as the individual perceives themselves as increasingly separated from who they were but equally unable to move forward (Szakolczai, 2017). However, until the individual is able to engage with their future, and develop a new stable future identity they remain trapped (Georgsen & Thomassen, 2017). The liminal hotspot itself has not been quantitatively substantiated but is argued to represent the feeling that the individual is trapped and unable to progress forward due to barriers such as rejection by the social group they sought to join, or an inability to move on from one's lost social connection. It is termed a hotspot, as the structures and rules of society that may be keeping them trapped, are increasingly worn down by the internal pressure the individual feels to move towards their past or future (Szakolczai, 2017). For example, this could lead an employee who exists in a liminal phase, to come to the point of breaking out of the entrapment by choosing a path that is completely outside of the norm, such as moving to a commune or similar. Further the ongoing and increasing uncertainty of the period can contribute to worsening mental health, and an increased desire to escape the pressures causing this decline.

Within the present study, I expect individuals who perceive the transition as ongoing will be those who have experienced a *subjective loss of past and future selves*, which in turn will be associated with poorer mental well-being.

STUDY 5

The present study aims to capture the impact of a prolonged and difficult transition on an individual's identity and in turn on their psychological well-being. To that end I surveyed individuals who had experienced the loss of their life partner, either to divorce, separation, or death. This represents one of the most significant relationship breakdowns that are likely to impact an individual's identity throughout their life, so it provides a means to understand what makes someone more vulnerable to psychological decline than another. The research already presented in this thesis has shown that one's past identity can provide a buffer against psychological decline for individuals immediately after a transition event. However, we cannot yet substantiate whether it becomes detrimental over time, or if this finding holds even after very significant losses. Therefore, the present study, which gets participants to reflect on who they were before the loss of their loved one can help to understand the role of the past self during significant transitions.

While it is acknowledged that separation and divorce can be an ongoing and iterative process, it is expected that those individuals who have not moved to new and stable base for their identity will experience poorer psychological well-being than those who have settled into their new reality. If strength of past self does become detrimental during an extended transition, those individuals who feel the transition has lasted for over a year and also have a strong sense of their past self, should have lower psychological well-being than those who have let go of who they were. The study also provides an opportunity to examine the idea of a liminal hotspot, as I expect

individuals who perceive the transition as ongoing to have a weaker sense of their past and future selves than those who see it as completed. I also expect the relationships for SLS with well-being variables that have been demonstrated earlier in this thesis to be replicated, such that strength of past and future selves is linked to lower social isolation, whilst positively associated with their self-efficacy. As with previous studies, strength of past self is expected to buffer the individual against psychopathology when they have lost their future self.

The importance of the relationship lost to the individual is central to theories around a changing self-concept and shifting social identities. If an individual loses a group membership that is important to who they are, they are more likely to experience psychological decline, however I expect this effect to be moderated by their connection to their past self. Therefore, it is expected that individuals who had a higher number of pre-transition group memberships will have coped more readily with the transition and be more likely to see the transition as complete, than those who had fewer group memberships. In addition, those who have a net positive gain in group memberships since the transition will have better well-being than those who have lost groups.

H1: Transitions that have lasted longer than a year are more likely to be associated with psychological decline.

a. For the individuals who perceive the transition as ongoing over a year following the loss, a loss of connection to their past self will be associated with lower psychological well-being compared to those with a strong sense of past identity.

H2: Tests for whether a liminal hotspot (unending transition) is associated with a loss of both past and future identities: Individuals who perceive the transition as ongoing more than a

year after the loss will have a weaker subjective perception of their past and future compared to those who see it as complete.

H3: An interaction is predicted between past and future identity on mental well-being. Lack of future identity will be related to reduced mental well-being, but less so for individuals with a stronger (vs weaker) past identity.

H4: The relationships between the SLS factors and the outcome variables of social isolation, self-efficacy and psychological well-being will be as indicated in Figure 24. Specifically, strength of past identity will positively predict self-efficacy and negatively predict social isolation, while strength of future identity will positively predict self-efficacy and mental well-being, and negatively predict social isolation.

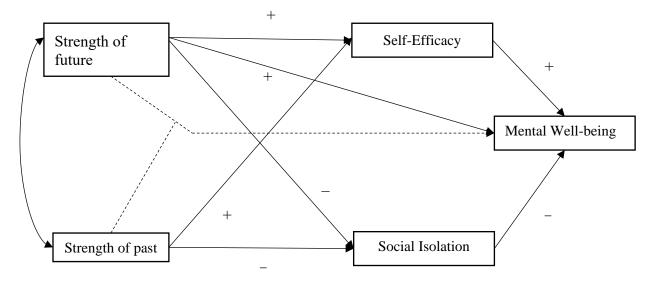


Figure 24: Predicted relationship between the subjective loss of self factors and the transition specific outcome variables. The dashed line indicates the predicted interaction.

H5: Individuals who report losing a group membership that was significant to them (in addition to their partner) will have lower mental well-being than those who lose no, or lose unimportant, group memberships.

H6: It is expected that strength of future identity will be positively associated with the number of post-transition group memberships the individual has gained, while the number of groups the individual has lost will be negatively associated with the strength of their past identity.

H7: There will be an interaction between group membership gain and their perception of their past self on mental well-being. Specifically, group membership gains will be related to better mental well-being, but more so for individuals with a stronger (vs weaker) past identity.

H8: The more groups individuals have gained since the transition, the higher their personal growth will be.

H9: It is expected that individuals who lost important group memberships, or who have a weak future and/or past identity will have poorer well-being and a greater incidence of psychopathology than those who gained new group memberships, had a greater number of pre-transition group memberships, or had not experienced a *subjective loss of self*.

Method

Participants

In total, 212 participants (39% male, median age of 55, mean 52) participated in the survey via MTurk. Eligibility for the survey required the individual to have experienced the loss of a significant other to divorce (139, 65%), separation (22, 10.5%) or death (48, 23%). For those who were divorced, 48% had no contact with their ex-partner, and a further 24% less than once a month. For those who were separated, 22% had no contact with their ex-partner, 27% saw them less than once per year, and 40% saw them multiple times per week or more. Three participants

were removed as their qualitative group membership responses indicated malignance (unintelligible sentences, noted they were in the wrong study).

Participants were asked to report information related to the loss of their significant other. In total, 76.5% of the sample were divorced or separated, and 52.2% no longer had any contact with the individual involved. They were asked whether they felt like the transition was still in progress through a single item "*Do you feel that you are still within the transition*". Around half (52.2%) of the participants perceived themselves to still be experiencing the transition that began with the loss of their partner. Of the 209 participants, 89 reported losing a group membership (other than their partner) consequent to the loss of their partner, of which 79 reported the group membership they lost was moderately important or higher.

Materials

Subjective Loss of Self. The 8 strength of past self items ($\alpha = 0.82$) and 6 strength of future self items ($\alpha = .90$) established as part of the scale in Chapter 3 were again used within the present study. The past self items capture an individual's subjective perception of the change in themselves from who they were since the transition event, example items include "*I am not the same type of person that I was before the change*" and "*I am concerned that I am losing (have lost) who I was*". The 6 future self focused items captured how the individual perceives their life once the transition event is resolved, sample items include "*I know what I will be doing in the future*" and "*I have a strong sense of who I will be*". The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Group membership changes. Group membership changes were assessed in real terms, capturing the number and name of the groups an individual was a part of prior to the transition, as well as the groups they had lost and gained since the transition. These were captured by

adapting the group membership listings approach demonstrated in C. Haslam et al. (2008). The participants were asked to list the group memberships they were a part of as well as to rate how important each lost group membership was, on a scale from 1-5 where 1 was not very important and 5 was extremely important. Of the 209 participants, 141 of the participants in the sample completed these items as instructed, thus analysis involving this data only includes the participants who genuinely responded to these questions. The remainder of the participants left the item blank making it impossible to determine their number of group memberships. 89% of the participants reported losing a group membership rated as at least moderately important (3) or higher. The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Personal Growth. The sense that an individual had experienced personal growth since the transition was captured through 4 items developed for this study. The aim was to capture the sense that the individual had taken on new opportunities since the loss of their partner and could see an improvement in their life. The four items were "*The loss of my partner made me aware of opportunities I wouldn't have otherwise seen*", "*I feel like I've grown as a person since the loss of my partner*", "*The loss of my partner has allowed me to pursue my goals*" and "*I am more comfortable with who I am now, than I have ever been before*" and had acceptable reliability ($\alpha =$ 0.83). The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Psychological Distress. The level of psychological distress was measured by the DASS-21 (Lovibond & Lovibond, 1996), which includes the depression ($\alpha = 0.92$), anxiety ($\alpha = 0.85$) and stress ($\alpha = 0.88$) subscales. Sample items for depression include, "*I couldn't seem to experience any positive feeling at all*" and "*I felt that I had nothing to look forward to*", anxiety items included "*I was aware of dryness of my mouth*" and "*I felt close to panic*", and stress items included, "*I found it hard to wind down*" and "*I was intolerant of anything that kept me*

from getting on with what I was doing". For this sample, 68.4% met the criteria for moderate or severe depression, 73.8% for moderate or severe anxiety and 52.6% for moderate or severe stress. This sample reported a level of psychopathology far greater than the general population. The questions were rated on a 4-point scale, "Never", "Sometimes", "Often" and "Always".

Psychological Well-being. Mental Well-being ($\alpha = 0.94$) was assessed using the Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007). The WEMWBS measures well-being through 14 positively worded items. Examples include *"Ive been feeling interested in other people"* and *"Ive been feeling good about myself"*. *For* this sample, 32.5% reported scores that indicate they have lower than average well-being compared to the general population. The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Social Isolation. Perceived social isolation ($\alpha = 0.85$) was assessed using The Friendship Scale (Hawthorne, 2006). The scale comprises six items that were rated on a 5-point scale from "Almost always" to "Not at all" and measures an individual's subjective social isolation over the past four weeks. It consists of negatively worded questions targeting social contact ("*I felt alone and friendless*"), and positively worded questions on being separate from others (*e.g., I had someone to share my feelings with*").

Self-efficacy. Self-efficacy ($\alpha = .92$) was assessed using the New General Self-Efficacy scale (NGSE) (Chen et al., 2001). The NGSE is a positively worded 8-item scale measuring an individual's belief that they can use their skills and abilities to deal with a situation. Example items include "*In general, I think that I can obtain outcomes that are important to me*" and "*I will be able to achieve most of the goals that I have set for myself*". The scale was rated on a 5-point scale from "Strongly Agree" to "Strongly Disagree".

Results

Strength of past self appears beneficial in coping with life transitions

An independent samples t-test was used to establish a basis for further analysis and indicated there was a significant difference in one's strength of past and future identity between those who saw felt they were still within the transition, and those who saw it as complete. As shown in Table 11, those who perceived the transition as still being in progress had a lower past self than those who had completed the transition. Similarly future self was lower for those who perceived the transition to be continuing than complete. There was also a significant difference in depression, anxiety stress and psychological well-being between those who saw the transition as in progress, with the Cohen's *d* indicating that these were medium strength effects. Personal growth, self-efficacy and social isolation did not significantly differ depending on whether the individual saw the transition as in progress or complete.²

In terms of duration of the transition, there was an inverse linear trend, with those who were more distant from the loss (69% of 10+ years) more likely to report the transition was complete than those who were closer to it (45% for a transition that was 5-10 years ago, 33% for 1-4 years ago and 20% for less than a year ago). As grief research suggests that many of the core symptoms of grief resolve within the first 12 months (O'Connor, 2019), a prolonged transition was determined as relating to the 82 individuals who perceived the transition as ongoing, and also had occurred over 1 year ago.

² A one-way ANOVA testing the type of loss of partner against the outcome variables did not show a significant difference between groups other than for personal growth, F(3,205) = 6.68, p < .001, $\eta 2 = .10$. (Divorced M = 3.58, SD = .99, Death M = 2.79, SD = 1.05, Separated M = 3.36, SD = .99).

Partially supporting the first hypothesis, the results in Table 11³ show that individuals who perceived the transition as having lasted for longer than a year had greater symptoms of psychopathology than those who saw it as complete. However, the second part of the hypothesis was unsupported as self-efficacy, social isolation, and strength of past self did not differ depending on whether the individual perceived the transition as ongoing. The second hypothesis which predicted a liminal hotspot (and thus unending transition) was not supported as individuals who saw the transition as ongoing only had a lower sense of their future, rather than both a loss of future and past selves. Surprisingly, the results show that self-efficacy and social isolation are unlikely to be markers for those who have completed the transition compared to those who had not as they did not differ between the two groups.

³ Multiple comparisons were not made as Rothman (1990) argues that not doing so results in fewer errors of interpretation when the data has been observed.

Table 11: Means, standard deviations, correlations across time and mean differences between those who perceive the transition as

ongoing or complete	ongoing	or	compl	ete
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	M (Complete)	SD (Complete)	M (Transition)	SD (Transition)	t	р	Cohen's d
Strength of past self	3.06	.94	2.74	.91	2.51	.013*	.35
Strength of future self	3.61	.88	3.27	.11	2.51	.013*	.35
Personal Growth	3.43	1.04	3.33	1.06	.69	.49	.01
Social Isolation	2.51	.92	2.77	1.05	-1.91	.058	26
Self-Efficacy	3.82	.86	3.92	.81	857	.39	12
DASS – Depression	11.45	11.08	18.15	12.29	-4.13	<.001**	57
DASS – Anxiety	7.90	7.94	13.12	9.56	-4.28	<.001**	59
DASS - Stress	10.86	8.96	16.43	8.57	-4.59	<.001**	63
Psychological Well-being	3.47	.86	3.11	.84	3.04	.003**	.42

Note. **p* <.05, ***p* <.001. (N=209, 102 not in transition, 107 in transition), *df* =207

	m(SD)	m(SD)	t(df)	р	d
	Not in a transition	In a transition			
Depression	11.44 (10.97)	17.51 (11.38)	-3.63(177)	<.001	.54
Stress	10.78 (8.91)	16.20 (8.15)	-4.21(177)	<.001	.63
Anxiety	7.75 (7.80)	12.73 (9.37)	-3.89(177)	<.001	.58
Psychological Well- being	3.50 (.84)	3.13 (.80)	2.94(177)	.004	.14
Social isolation	.2.51 (.91)	2.73 (1.02)	-1.56(177)	.12	-
Self-efficacy	3.85 (.82)	3.89 (.82)	31(177)	.76	-
Strength of past self	3.05 (.91)	2.84 (.89)	1.51(177)	.13	-
Strength of future self	3.62 (.85)	3.24 (1.11)	2.54(149.57)	.01	.10

Table 12: *t-test results for individuals whose transition occurred more than one year ago* (N=179, 97 not in transition, 82 in transition)

In order to test the third hypothesis on whether past identity moderates the relationship between future identity and mental well-being a linear regression was run, controlling for whether the individual saw the transition as ongoing. Psychological well-being was entered as the outcome variable, and transition status was entered at step 1. Social isolation and selfefficacy were entered at step 2, with the SLS variables of past and future were entered at step 3 and the interaction term at step 4. The results indicated there was a significant effect of the SLS variables at step 4, $R^2 = .62$, F(1, 202) = .60, p = .001, but this effect was due to future identity (β = .31, p < .001) rather than past identity (β = .04, p =.51). The interaction term was not significant (β = .04, p = .44). This suggests that strength of future self is a better predictor of whether an individual is exiting a transition (and developing better well-being) than past identity, and that past identity does not buffer against psychological decline in the long-term. However, it also shows that strength of past self does not worsen psychological well-being in these extended transitions.

SLS predicts social isolation, self-efficacy, and psychological well-being

The fourth hypothesis related to the predictive capacity of the SLS variables on the markers of the transitional phase, self-efficacy, and social isolation. The relationships between the variables were tested using Structural Equation Modelling using AMOS (Arbuckle, 1995 - 1999) using maximum likelihood analysis, while the means and intercorrelations are depicted in Table 12. To test the first hypothesis, I constructed a model as shown in Figure 25 to explore the relationship between strength of past self and future with the outcome variables of self-efficacy, social isolation, and psychological well-being. The model had reasonable fit $\chi 2$ (4) = 5.48, p = .24, $\chi 2$ ratio = 1.37, RMSEA = .042, CI90 = [.00, .12]; CFI = .997, SRMR = .027. As expected, past (β = -.32, p <.001) and future identity (β = -.39, p <.001) predicted lower social isolation, whilst future identity predicted self-efficacy (β = .30, p <.001) and psychological well-being (β = .31, p <.001). However, strength of past self did not predict self-efficacy (β = .01, p = .17). The interaction between strength of past self and future on psychological well-being was

Understanding how the loss of an important group membership impacts on the transition self-concept.

not significant ($\beta = .034$, p = .39). Overall, the model explained 61% of the variance in wellbeing scores.

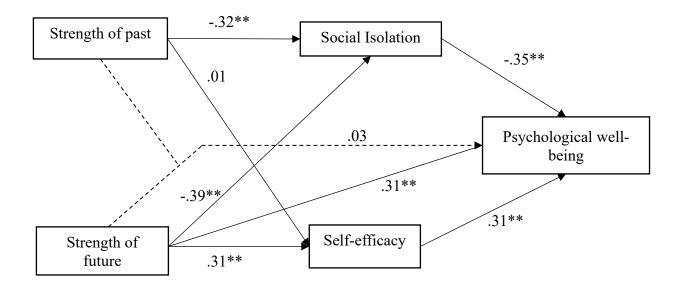


Figure 25: Predicted relationship between the subjective loss of self factors and the transition specific outcome variables. The dashed line indicates the predicted interaction.

	М	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Past	2.90	.94	-	-	-	-	-	-	-	-
2. Future	3.44	1.01	.49**	-	-	-	-	-	-	-
3. DASS Depression	14.88	12.16	50**	52**	-	-	-	-	-	-
4. DASS Anxiety	10.57	9.17	36**	34**	.73**	-	-	-	-	-
5. DASS Stress	13.71	9.17	37**	40**	.76**	.771**	-	-	-	-
6. Social Isolation	2.64	1.00	55**	56**	.60**	.49**	.53**	-	-	-
7. Self-efficacy	3.29	.84	.29**	.45**	46**	40**	38**	53**	-	-
8. Psychological well-being	46.03	12.11	.46**	.65**	72**	50**	58**	68**	.60**	-

 Table 13: Intercorrelations and descriptive statistics for SEM analysis

Notes. N (209). * p < .05, ** p < .001.

Losing an additional important group did not predict well-being

The fifth hypothesis explored whether individuals who had lost an important group membership in addition to their partner were more vulnerable during the transition. A fully saturated model as seen in Figure 26 was created in AMOS to test whether losing an additional important identity moderated the relationship between strength of past self and well-being, whilst controlling for the individual's strength of future self. The results indicated that there was not a significant interaction ($\beta = -.01$, p = .89) in the full sample, nor when looking at only those who felt the transition was ongoing ($\beta = -.57$, p = .61), or complete ($\beta = .03$, p = .83). A similar profile of results occurred for future identity, for both incomplete ($\beta = -.12$, p = .13) and complete (β = .04, p = .70) transitions. The results also indicate that losing an important group membership (or memberships) in addition to their partner did not predict a difference in well-being scores (β = -.02, p = .95).

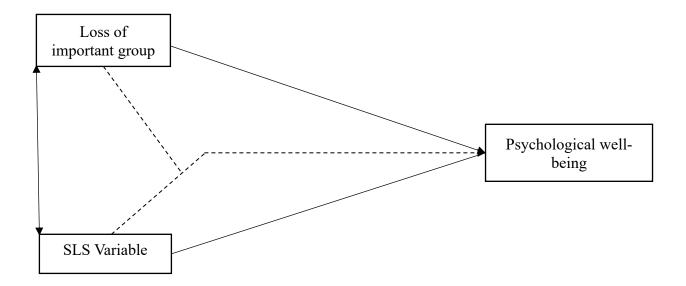


Figure 26: Saturated model to test for interaction between the SLS variables and the loss of an important group membership

Relationship between group membership changes and identity factors

The sixth hypothesis examined whether group membership changes were associated with the strength of an individual's identity following the loss of their partner. A model was constructed in AMOS as shown in Figure 27. Compatibility of group memberships was not assessed as this variable was not included in the survey due to an error by the researcher when uploading the study. The model was an acceptable fit for the data, χ^2 (3) = 3.80, p = .28, χ^2 ratio = 1.27, RMSEA = .000, CI90 = [.000, .13]; CFI = .998, NNFI = .989, SRMR =.0310. for example the χ^2 ratio was acceptable (<2), and while the upper bound of the RMSEA is greater than 1.0, this is likely due to the small number of degrees of freedom (Kenny et al., 2015). As the SRMR is below 0.08 and the NNFI is above 0.90 we can conclude the model fit is acceptable.

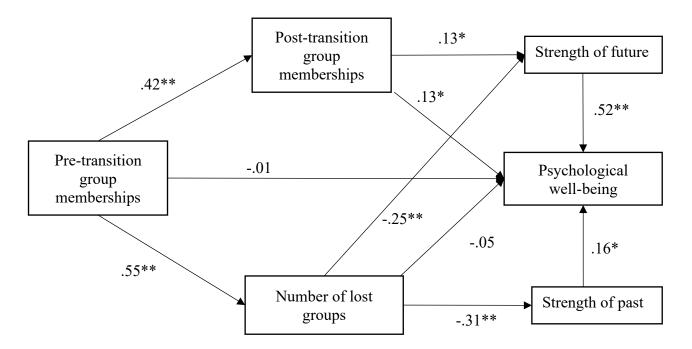


Figure 27: Composite model showing the relationships between group membership changes and *subjective loss of self* on psychological well-being

The results show that as predicted (H6), greater group membership loss predicted a weaker past self ($\beta = -.31$, p < .001), whilst group membership gain predicted the individual's connection to their future ($\beta = .13$, p = .027). In addition, a loss of group memberships during the transition had a negative effect on future identity ($\beta = -.25$, p < .001). The number of post-transition group memberships the individual held following the transition also had a direct effect on well-being ($\beta = .13$, p = .034), however the direct effect of future identity was a stronger predictor ($\beta = .52$, p < .001); past identity was also significant ($\beta = .16$, p = .010). Surprisingly, the number of pre-transition group memberships was not associated with psychological well-being ($\beta = .01$, p = .94).

The more the merrier

The seventh hypothesis related to whether the net growth or loss of group memberships since losing their partner was associated with better health outcomes for the individual. Net growth was computed through a simple calculation of the number of pre-transition and post-transition groups recorded by the participant. A simple correlation run prior to further analysis indicated that both past (r = .25, p < .001) and future (r = .20, p = .004) identity were associated with a positive net change in number of group memberships. Similarly, net growth of group memberships was associated with better psychological well-being (r = .23, p < .001). A saturated model was created to determine whether past identity moderated the relationship of net growth of group memberships on psychological well-being for those individuals who still saw the transition as in progress. There was not a significant relationship between the interaction term and well-being for either those who perceived the transition is in progress ($\beta = .084$, p = .10) or complete ($\beta = .030$, p = .66). Interestingly, the direct effect of group membership gain on psychological

well-being was not significant for those who perceived the transition as in progress ($\beta = .05, p = .37$) but was for those who saw it as complete ($\beta = .17, p = .017$).

Positive transition outcomes

The eighth hypothesis predicted that individuals who gained more group memberships would be more likely to see the transition as a period in which personal growth occurred. Further, this effect was expected to be more pronounced for those individuals who perceived the transition to be complete. This hypothesis was not supported, as the number of groups the individuals was a part of after the transition did not predict their potential to see the transition as a place from which to grow ($\beta = -.002$, p = .975).

Incidence of psychopathology

The ninth hypothesis looked at the risk of mental well-being declines and development of psychopathology. It was noted that the sample experienced significantly greater levels of psychological distress than the general population, emphasizing the importance of providing support to individuals experiencing life transitions. A fully saturated model tested the direct pathways between the SLS factors and group membership change variables (gain, loss, and pre-transition groups) with mental well-being and the DASS subscales of stress, depression, and anxiety. Unexpectedly, there were few significant relationships between net group membership change and psychopathology. Gaining group memberships was only weakly related to mental well-being ($\beta = .09$, p = .035) and depression ($\beta = -.04$, p = .038), while losses of important groups and pre-transition group memberships did not show significant relationships to any of the outcome variables. Thus, a portion of the hypothesis, that greater pre-transition group memberships would have better well-being, was unsupported. In contrast, the SLS variables showed a strong relationship to well-being (strength of past self $\beta = .16$, p = .010; strength of

future self $\beta = .52$, p < .001), depression (strength of past self $\beta = .20$, p = .025; strength of future self $\beta = .33$, p = .001), stress, (strength of past self $\beta = .21$, p = .006; strength of future self $\beta = .24$, p < .001) and anxiety (strength of past self $\beta = .24$, p = .001; strength of future self $\beta = .16$, p = .034) as predicted. Interestingly, the relationships of SLS to the DASS variables became weaker or non-significant for those not in transition (strength of past self \rightarrow depression β = ..27, p < .001; strength of future self \rightarrow depression $\beta = ..33$, p < .001; strength of past self \rightarrow stress $\beta = ..17$, p = .096; strength of future self \rightarrow stress $\beta = ..22$, p = .029; strength of past self \rightarrow anxiety $\beta = ..18$, p = .094; strength of future self \rightarrow anxiety $\beta = ..11$, p = .30). In contrast, strength of past self appeared to be a somewhat stronger predictor of psychological distress for those who felt the transition was ongoing (strength of past self \rightarrow depression $\beta = ..35$, p < .001, strength of past self \rightarrow stress $\beta = ..25$, p = .017, strength of past self \rightarrow anxiety $\beta = ..29$, p = .006).

Discussion

This chapter of the thesis aimed to provide insight as to how an individual's *subjective loss of self* was affected by losing a very important social relationship. It was also important to determine whether individuals were more likely to be experiencing a prolonged transition if they had maintained a strong sense of their past self. These two findings are the key results of Chapter 5. The results show that past identity was not linked to the experience of being in transition for those individuals whose loss had occurred over a year ago and was linked to better well-being when the individual saw the transition as ongoing. One surprising finding was the markers of transition completion, social isolation, and self-efficacy, also did not vary across transition status whilst future identity did. This suggests that successful completion of a transition requires more than feeling supported and efficacious; the individual must also be able to perceive a positive future identity. These results further strengthen the argument that strength of past self provides a positive resource for individuals during a transition, and that maintaining this connection does not contribute to developing psychopathology or a stalled transition. However, it also shows that while past identity can support well-being, it does not appear to move the individual out of a transitional space by itself. It appears necessary for an individual to address their *subjective loss of future* in order to move forward.

Unexpectedly, the results also suggested that when an individual loses a very important group membership, such as a partner, that the loss of other additional important groups has only a minor impact on psychological well-being. Potentially, some of the groups that were lost in the transition were tied to the lost partner which led to an underestimation of the number of groups they previously had contact with. The results also show that the net change in group memberships since the transition is associated with their overall well-being. The latter point aligns with the predictions of the Social Identity Model of Identity Change (SIMIC) as individuals who gained more group memberships had better psychological well-being than those who lost groups. However, having more group memberships prior to the transition was not associated with psychological well-being. While this finding differs from that of Iyer et al. (2009) it may be consequent to the centrality of the lost individual, as their partner may have been the socially connected individual, leaving them without group memberships after the loss. Additionally, the results indicate that these relationships became non-significant when the SLS variables were included in the analyses. Indeed, the SLS variables were associated with changes in the number of group memberships an individual held. Strength of past and future selves were negatively associated with losing group memberships, whilst strength of future self was associated with the number of groups an individual had gained. As such it appears that as predicted, the individual's well-being is affected by group membership change, but only to the

extent that it affects their self-perception. This finding supports the argument that the SLS scale can provide a useful indicator as to how an individual is coping with the effects of the transition. It also highlights the congruence between shifts in identity and group membership change.

The study suggests an avenue for social psychological research, in assisting people to adjust to their new life following the loss of a partner or significant other. Identification of individuals who have lost connection to their future self and consequently stagnated in the transition could allow for more targeted support for those who are most vulnerable. Further, the results suggest that with refinement, measuring strength of future self may provide an estimate of their progress out of the transition, as it is higher in those who had completed the transition.

The role of past identity in the present study is unclear, as while it was not detrimental to the individual during the transition, it also did not significantly differ between those who were in, or not in, a transition. Strength of past self was significantly linked to lower social isolation, as well as greater psychological well-being, and so appears to be generally beneficial. The lack of difference in strength of past self for those in a transition questions the premise of the liminal hotspot articulated by Szakolczai (2017). It may be that this conception of strength of past self does not encapsulate the feeling of one's past being lost to them. Alternatively, the absence of this finding may instead provide merit to the future-centric arguments of other transitional theories: that future identity is essential to exiting a transition and that its absence is the cause of a stalled transition, while past identity can only act as a buffer (Bridges, 1986; Little et al., 1998). There are of course limitations that could explain the present results, such as some participants having to reflect on who they were over 10 years prior which may have limited the accuracy of their responses. Similarly, the distance from the loss may have allowed valence judgements to affect perception, such as scoring low on past self because they saw who they used to be in a

negative light compared to who they have become. Tracking changes in an individual's selfperception immediately following the loss of a partner (although complicated by normative grief experiences and ethical practice) may provide insight into the individuals who are likely to adjust to the transition, and those who may require additional support.

It is important to recognize that this study also appears to have found preliminary evidence that suggests that being trapped in a transition has ongoing negative effects on an individual's psychological health. While the 'liminal hotspot' was not found as characterised, it was noted that individuals who spent significant time in the transitional phase had lower wellbeing than those who had completed it, providing quantitative evidence that longer transitions are more difficult. Potentially, a liminal hotspot is distinct from subjective loss of self, or in fact only represents a complete absence of future self. It should also be noted that this sample had substantially poorer well-being than the general population. This could potentially explain some of the inconsistent findings regarding group membership change – as the high level of depression and anxiety may be reducing their exposure to new social situations. As this is a single study it cannot be determined whether this is a characteristic of all individuals who have experienced significant loss, or a sampling bias. Overall, the findings highlight the need for transition research and support, as the results indicate that not all individuals will eventually adjust to the transition and develop a strong future self with time.

The single timepoint for the present study prevents more impactful conclusions around the predictive power of identity factors and group membership changes. Additionally, it was identified that there was variation in the attitude towards the loss with some individuals desiring and being glad for the loss (i.e., divorce), whereas for others the loss was unexpected or difficult (i.e., traumatic, or unexpected death). While this paper remains useful as a preliminary

investigation, future research should look at one form of loss specifically, to determine if there are unique characteristics for each type of loss.

An additional limitation of the present study was the participants' identification of their various group memberships. The responses that were provided often lacked detail and prevented more in-depth analysis of the changes to an individual's social network as a result of the loss. Future research that wishes to focus on transitions that have occurred sometime in the past should be conducted using semi-structured interviews as surveys or the even the online Social Identity Mapping (SIM) (Bentley et al., 2020) tool are unlikely to get a thorough response. The issues with capturing group membership again highlight the usefulness of the SLS scale as it does not require accurate memory of who one was or their group memberships, but instead focuses on how they feel about themselves in the moment compared to their perception of who they saw themselves to be.

Overall, the present study presents evidence for how people cope with significant loss, in terms of their psychological health and self-perception. The study identifies that past identity is not detrimental, and that future identity appears to be an indicator of transition completion. It also provides evidence that gaining or losing group memberships affects an individual's past and future identities. This finding could help to explain why the same transition could lead to vastly different outcomes between people in the same cohort or situation. It also serves to highlight the need to identify and support those individuals who are struggling to adjust, as otherwise they will remain 'lost in the transition'.

General Discussion

Chapter 6

General Discussion

The research conducted as a part of this thesis explores the nature of transitions and their impact on our sense of self. The experience of a transition thus far has been understood through qualitative transition theories and shifts in our social identities, as represented by the Social Identity Model of Identity Change (S. A. Haslam, 2017; Iyer et al., 2009; Jetten & Pachana, 2012). The present theoretical perspective adds to our understanding by investigating the role of a subjective loss of past and future self following the transition event, that is, a reduction in an individual's subjective ability to be the person they were and understand what person they are going to be. The present thesis demonstrates how this loss of identity has consistent associations with well-being, in addition to those explained by group membership changes. The studies presented in this thesis explore how changes in our social identity can cause a *subjective loss of* self (SLS), which is in turn associated with psychological decline. The model of subjective loss of self in this thesis draws upon transition research from several disciplines such as social psychology, organizational psychology, business management, nursing and healthcare, and relationship counselling. Indeed, one contribution of this thesis is an empirical demonstration of the shared features of varied transition experiences. The findings presented suggest that our perception of ourselves is a meaningful indicator of how we are coping with a transition, and that our perspective of our future selves is a key indicator of our well-being.

This final chapter provides a discussion of the findings of this thesis, with reference to the initial research aims as well as the caveats that highlight the need for further research. First, I will show how the findings relate to our understanding of transitions, as well as how our subjective perception of identity relates to well-being. Second, I will discuss how the results of

General Discussion

the present research have implications for individuals who may be planning or have recently experienced a transition in the work or personal lives. Third, I will discuss how the SLS scale adds to our understanding of social identity transitions, as well as to broader transition theory. Fourth, I will touch on the relevance of this research to current world events, as it has implications for future research and practices. Last, I will comment on the limitations of the present thesis, highlighting the areas of transition theory and *subjective loss of self* that merit further exploration.

Back to the Future: Subjective loss of self provides a metric for vulnerability to psychological decline during a transition

This thesis presents a new model for understanding how individuals process the changes to their identity following a transition, *subjective loss of self*. The development of this model drew upon the qualitative experiences of individuals who had experienced a significant transition event, and were attempting to cope with the new level of uncertainty (Banmen, 2002; Bridges, 1986; Chick & Meleis, 1986; Fiol, 2002; Greco & Stenner, 2017; Van Gennep, 1960). The core theme of previous research is that the transition event leads to the individual feeling disconnected from who they were before the transition, as well as who they will become. Consequently, I created a measure that captured the individual's *subjective loss of past and future selves*. This approach adds to our understanding, as an individual's thoughts about their past and future selves are not directly captured in other major theories of transition such as SIMIC. Further, measurement of SLS provides a novel means of determining which individuals are struggling to adjust to the transition and would benefit from intervention.

The idea behind this model is that one's subjective perception of themselves is an important and accessible means of determining whether an individual is coping with the

General Discussion

transition. Further, SLS may be a more accessible means of assessing an individual's vulnerability during the transition than measuring changes in their social network as these may occur more slowly or not be directly recognised. This perspective allows testing of the propositions around psychological well-being made in previous qualitative transition literature. In addition to operationalization of *subjective loss of self*, the findings of this thesis show consistently, that one's perception of their past and future has a clear and consistent relationship to self-efficacy, social isolation, and psychological well-being. These results provide empirical evidence for the idea that individuals within a transition perceive themselves as more ineffectual and isolated if they have a *subjective loss of self*. Capturing the 'liminality' of identity where the individual is adrift between their past and future, opens the door to quick identification and intervention that reduces their degree of psychological decline.

The SLS scale also allows the exploration of our past and future selves as distinct entities affecting our experience of a transition. Thus far, maintaining a connection to one's past during a transition has been predominately seen as a net negative – preventing or inhibiting the individual from developing a stable new identity (Bridges, 1986; Iyer et al., 2009; Thomassen, 2009). The results of this thesis suggest the opposite, as maintaining a strong subjective perception of one's past was consistently linked to better well-being outcomes, and not once to increased difficulties. Additionally, Study 5 found that past identity was not lower in individuals who perceived the transition as ongoing, suggesting that it was not a factor in determining the length of the transition. However, there were mixed findings around past identity's ability to provide a buffer against psychological decline in the absence of a strong future self. The inconsistent findings could either be a consequence of methodological or sampling issues, or evidence against the idea

entirely. Even so, the benefits of strengthening or maintaining a connection to your past self during the transition were demonstrated within this thesis.

An important contribution of these studies is the finding that subjective strength of future self is strongly, positively, and uniquely associated with well-being outcomes over and above the influence of group membership changes, self-efficacy, and social isolation. The results also indicate that strength of future self may be a marker of an individual moving through the transition in healthy and positive manner. This adds to our understanding of identity during periods of change, as well as emphasizes the importance of identity and social identity in supporting an individual through a transition. Any approach to transitions that neglects identification of individuals who have experienced a subjective loss of future self is missing part of the picture. It also suggests that we should not be focusing solely on the outcome variables of psychological well-being or psychopathology, as these factors are largely consequent to social identity during the transition. As a result, this research affirms the importance of social identity and thus *subjective loss of self* as critical components that must receive attention to reduce the risk psychological decline.

The present research also adds to our understanding of transitions by providing a new construct for inclusion in transition research: an individual's subjective perception of their past and future selves. The results of the studies included in this paper suggests that a strong sense of past and future identity is consistently and reliably associated with better well-being outcomes irrespective of the type of transition experienced. It was less clear, unfortunately, which factors reduce the likelihood of an individual losing their connection to their future or past selves, with varied results across the presented studies. However, the movement of our group memberships

during the transition was noted to be an important component to understanding this relationship. The loss of previous group memberships, and the compatibility of new groups appear to be particularly related to *subjective loss of self*, while gains in group memberships appears to predict strength of future identity later in the transition. This provides both an avenue for future research and reinforcement that it is critical to consider the social psychological perspective when assessing clinical mental health issues. An additional question for research is whether the type of transition (i.e., desired or imposed, in your workplace, personal life or social network, or related to physical or mental health diagnoses) determines the individual's ability to perceive a positive future pathway for themselves. Similarly, further research is needed to clarify causation, that is, whether losing one's future identity causes or is consequent to a decline in mental health, as this is especially relevant for individuals who have clinical depression and may find seeing a positive future particularly difficult.

How to support individuals who are about to, or have, experienced a transition

The present research advances our understanding of how people cope with and experience significant transition events in their life. Further, it provides empirical demonstration that transitions lead to individuals feeling isolated, overwhelmed, and ineffectual at achieving their goals. Social psychology is increasingly being seen as an avenue by which we can achieve gains by reducing psychopathology, or proactively minimizing its risk (Jetten et al., 2009). As such, the results of this thesis allow clinicians to better understand and support their clients when they move through a transition. Indeed, the empirical findings of this thesis provide further credence to the Social Cure idea that social psychological interventions can be an adjunct to mainstream clinical interventions (Jetten et al., 2012).

The SLS scale may in time become a way to gain a quick, valid, and reliable means of understanding an individual's perception of themselves at that moment. While it is far too early in its development to show efficacy or validity in this area, the present research suggests that an individual's subjective sense of loss makes a meaningful contribution to their psychological wellbeing. If this was substantiated, it could be used as part of an early identification screener for risk of mental illness. In order for this to occur, a study investigating its use as part of an intervention such as Groups4Health in treatment of depression or anxiety would have to show that its contribution was meaningful in understanding or treating the client (C. Haslam, Cruwys, Haslam, et al., 2016). From there, including the scale in a study comparing CBT to a social psychological intervention could then show whether the SLS scale may provide guidance around which therapy is most likely to be effective. Of course, this thesis does not suggest that the scale could be used in this way as it currently exists, simply that the present findings suggest there may be a pathway to exploring the idea.

It is important to also reflect on the concepts within the SLS scale and ensure that they consistently represent the constructs of loss of past and future self. In this thesis I have presented the idea that perceiving a loss of one's future self could lead to negative consequences for the individual. However, it is possible that the constructed scale requires refinement to discriminate between similar ideas such as feeling trapped within a single future, or a negative perception of who they are or will be if they continue on their current path. These individuals may have a strong sense of their future but confound the scale due to their lack of positivity towards these outcomes. The strength of past scale appears quite consistent as disconnection from who one was is more straightforward. However, the scale could benefit from consideration of a person's attributions towards their past, and whether they see it as uniformly or generally negative

compared to their present situation. Even with these questions, the research in this thesis demonstrates the utility and proof of concept for the model, and such that it is worthy of refinement in the future.

Subjective loss of self adds to our understanding of social identity transitions

Our current understanding of transitions does not fully explain why, even though experiencing the same transition event, some individuals are relatively unaffected or even thrive, whilst others flounder. We know transitions cause changes to one's social identity, due to the loss of a group that was part of the individual's conception of themselves. Where the present research differs from group membership-based research is the focus on *subjective loss of self* of identity. Indeed, this thesis shows that our perception of our own identities can be impacted even when the group membership changes are not evident or salient to the individual (Chapter 3). Social identity theory remains fundamental to our understanding of a life transition and underpins SLS; however, as mentioned, the specific pathways between SLS and SIMIC remain unclear.

Within this thesis, each of the studies that have a measure of group membership shows that these constructs are related to SLS, generally through compatibility, group importance, or maintaining group memberships. For example, it was evident that each of the measures of group membership change have been found to have a relationship with strength of future self, but which component had the relationship varied between studies. For example, in Study 2.1 and Study 3, the compatibility of group memberships was positively associated with strength of future self, whereas in Studies 3 and 5, the number of new group memberships was positively associated with future identity; a loss of previous group memberships was also associated with a decline in strength of future self in Study 5. Potentially, this is a function of the nature of the change. For example, compatibility could be less important in supporting a future self for

transitions where a social group or interpersonal connection has just fallen away (leaving a hole), while compatibility could be more important where a social world and interpersonal connections have changed or increased.

Another explanation is that group membership changes work on a different timescale to one's subjective perception of their future. After the disrupting event that begins a transition the rate at which an individual loses their group membership will vary substantially. In some instances, the loss of a group memberships will be immediate, such as in moving to a new city or the death of a loved one. However, the impact of losing these social connections in terms of their social identity and the practical support they provide may not occur instantly, instead gradually impacting their well-being overtime. It remains to be seen whether a loss of future identity occurs simultaneously to their loss of group memberships, or if it occurs faster or slower. I suspect that often an individual will continue to perceive themselves to be connected to their group memberships even as they weaken or are lost, but that their sense of future identity will be lost more rapidly when they encounter adversity in their new environment. This would explain the variable relationship of losing one's future self with components of group membership, as it would vary both on the perception of the group itself, and the adverse events the individual encountered since the transition.

It is clear that group membership changes affect SLS but potentially the relationship between the variables is idiosyncratic: for one individual it is the loss of a single group that impacts on their sense of past identity, whilst for another it is the loss of many less important groups. While this could suggest an issue in terms of the constructed scale, I argue that it instead demonstrates the difficulty in measuring social identity change through group memberships, as was highlighted by Cruwys et al. (2016). Potentially, as argued by these authors, we cannot

assess identity change through only one aspect of group membership, but instead it requires us to capture the compatibility, prototypicality, social contact and importance, as well as the number of group membership the individual holds. Future research combining SLS with the recently developed online Social Identity Mapping Tool (SIM) (Bentley et al., 2020) could alleviate some of these difficulties by providing a more comprehensive picture of the individual's social network.

The present research also adds to our understanding of social identity transitions by integrating the broader transition literature with established social psychological perspectives. At present, these qualitative approaches are often used with best practice models for how to support employees during a merger (The University of Western Australia, 2017), or to support a family after a significant life event (Sayles, 2002). This thesis suggests that these two bodies of research do not clash with each other, but work alongside, and are broadly linked to the model of identity change described in SIMIC. The findings of this thesis demonstrate that *subjective loss of self* adds to our understanding of how people cope with transitions. Additionally, it partially explains why group membership changes alone do not encapsulate all an individual's vulnerability during a psychological transition.

Understanding the global experience of transition caused by COVID-19

It could be argued that everyone has been forced into some form of transition due to the spread of COVID-19 over the past two years. In particular, the restrictions, altered worldviews and increased interpersonal and international isolation may have led to sufficient uncertainty for some individuals to experience a significant loss of connection with their future self. From the research in this thesis, we know that the loss of a future self is a significant barrier to exiting the transition and regaining positive mental health. The need for these individuals to rebuild their

sense of future self when normality returns could provide an opportunity to test social psychological interventions as well as the SLS theory. Additionally, the length of the transition brought about by COVID-19 could provide an opportunity to look at whether or how SLS affects well-being in the long-term, over and above that which can be explained by the breakdown of our social networks.

One of the most pressing areas for future research using SLS is in young people, especially those who have had key formative years of their schooling impacted by COVID-19. None of these individuals saw the pandemic as part of their future identity, and thus all would likely have had to adjust to this, whilst also being more vulnerable than those in a more established stage of life. In addition, whilst not examined in this thesis, it would be of interest to examine how long it takes an individual to regain a lost sense of future self, and what factors are linked to this outcome. This research would tie in nicely with Social Identity Mapping (SIM) (Cruwys et al., 2016) as it is probable that many individuals will also have experienced substantial changes to their social networks over the pandemic. One interesting question is whether the pandemic caused people to lose important group memberships, or whether it predominately removed groups peripheral to the individual without greatly impacting on their overall sense of self.

Of course, the pandemic also provides an opportunity for the use of the SLS scale, as it is easily scalable and may have implications for clinical use. The scale would allow a company or organization to tap into how their employees or students are adjusting to their present situation. In turn, those that are identified as at risk could then benefit from a basic intervention such as an individual phone call or might require a more intensive intervention that strengthens their future self within their company or organization.

Finally, the current COVID-19 situation also highlights the need to recognise and acknowledge the transition in order to move through it. Nursing research suggests that individuals who ignore or who are unaware that they are in a transition, tend to have poorer health outcomes (Meleis et al., 2000). There is an avenue for future research here, as it may be that individuals who are willing to radically accept the transition, are more able to regain a connection to their past and future and move through the transition. By identifying individuals who do not see a pathway out, we can target those who are 'lost in transition' and most at risk of ongoing and significant psychological decline.

Limitations and future directions

This thesis aimed to explore the reasons why some individuals fare better across a transition than others by drawing on theories to understand how transitions altered one's perception of themselves. My research has resulted in the construction of the *Subjective loss of self* (SLS) scale, which has shown a strong association with well-being, social isolation, and self-efficacy in Chapters 2, 3, 4 and 5. However, the limited overall sample and only two timepoints captured in the two studies in Chapter 4 meant that it was not possible to examine extended causal pathways for *subjective loss of past or future self*. While this limits the strength of the findings, the SLS variables had consistent relationships with self-efficacy, social isolation and psychological well-being which indicates the data fits the theoretical argument.

An additional consideration when looking at the findings of the present research is that the use of internal student sampling, as well as MTurk presents an issue in terms of generalizability. The samples included in this study, other than those in Chapters 3 and 5, were predominately young, western, university educated females. While this is not uncommon for psychological research, it does present an issue in terms of generalizability to other cultures and

wider society in general. Positively, Chapters 3 and 5 both have far more representative samples in terms of age and gender, and the findings in terms of the SLS variables largely align with my theoretical predictions, adding weight to my conclusions.

Another important factor to consider when looking at the results of the present thesis, is that there remains uncertainty around whether the scale items truly capture one's *subjective sense of loss*. While the scale remained consistent, it is possible that the mixed findings with relation to group membership are consequent to the scale not representing the construct theorised. Alternatively, it is possible that the theory itself was incorrect, and that subjective sense of loss moderates the relationship between group membership changes and psychological well-being, rather than being consequent to it. This presents a clear question for future research using the SLS scale, and a barrier for its broader use until this question is resolved.

A related limitation to construct validity is the difficulty in capturing group membership change. This problem has been widely acknowledged and was the impetus for the development of the Social Identity Mapping tool (Cruwys et al., 2016). Unfortunately, the online version of SIM became available too late in the research program for it to be investigated for use in this thesis. Consequently, it relied upon self-reported group memberships and the Exeter Identity Transition Scales (C. Haslam et al., 2008). While this scale has been widely utilised in social identity research, the inability to capture the real number of group changes, as well as their importance to the individual limits the findings of the present paper. I would recommend that future research rely on a comprehensive measure of group membership such as SIM in order to ensure that the effect of group membership change is appropriately captured.

Thus, the present research deepens our understanding of transitions, as well as how individuals cope with these significant shifts in their lives. This thesis has demonstrated that

changes to our social identities (and our perception of these changes) is a key feature to understanding the difficulties of a transition for the individual. Consequently, this research highlights the need for more social psychology informed clinical interventions that can be applied in difficult transition periods. It may sound grandiose to suggest, but this research potentially provides a basis for the development of a unified model of well-being during transitions – one that highlights the importance of social connection and self-perception during a transition rather than focusing on individual factors such as resilience or self-care strategies. Indeed, the present research demonstrates the value in understanding each individual's perception of the transition, and through identifying it, provides an avenue by which to address each key deficit. Of course, in order to move forward towards a unified model, a more thorough understanding of the timeline and mechanism for changes in our self-perception is required. Following individuals from before a transition, through the destabilizing event and into the new reality will paint a clearer picture as to the rate at which an individual loses connection to who they were and will be, as well as determine the role of each factor that assisted them to move through the transitional space. From the research I suspect that the building of new social connections will strengthen an individual's future self, allowing them to perceive a sense of control and mastery over their new reality. Linked to this perspective, and not able to be determined in the present thesis, is whether the transition event directly causes a subjective loss of self – which leads to a disconnection from previous groups and an unwillingness to engage with new ones, or whether group membership changes always precede SLS.

The demonstration that social identity and our perception of it, affect our well-being during transitions also has implications for future research in the fields of transition management and healthcare. It is evident from the research presented that these specific constructs generally

go unstated in broader transition literature, with the focus generally being on an individual's personal well-being. This research reframes the conversation around transitions and asks those who are involved in managing transitions whether they can see the complete picture. By understanding how social identity is involved in a transition, transition managers, clinicians and other support workers will be better placed to achieve good outcomes for their clients. In practice, this could involve the inclusion of the SLS scale as part of a screener, prior to, or as the transition takes place. Individuals who are identified as having lost connection to their future or past self would then be specifically targeted for support using a social psychological intervention. This approach also increases the importance of the individual's perception of the transition, providing a means to validate and normalize their experience. Thus, SLS gives workplaces the understanding that not all of their employees will be perceiving the experience uniformly, and that targeted interventions could be necessary. Studies into transition management that use SLS could then also provide evidence for The Social Cure (Jetten et al., 2009) and highlight the importance of social psychology to maintaining well-being during difficult life transitions.

Conclusion

The present thesis presented the idea that an individual's vulnerability to psychological decline during a transition could be captured by looking at their *subjective loss of past and future selves*. This thesis demonstrated the construction of a measure, and its validation as a means of understanding the variance in coping across transitional periods. In addition, the thesis investigated key questions around the nature of the self during transitions, as well as the relationships between subjective self and group membership change. The findings support the argument that *subjective loss of self* provides a meaningful and unique contribution that we can

use to understand the impact of a transition on the individual, and potentially guide them to complete it. Further, it demonstrated the unique contribution of one's future self to supporting well-being, and that our past selves do not necessarily inhibit progress through the transition. In sum, the results indicate that an individual's loss of self predicts their likelihood of experiencing psychological decline during a transition, beyond that explained by changes in group memberships. Finally, this research has important implications for transition management by providing a more targeted means of assessing how people cope with transitions, as well as highlighting the need for more widespread social psychological interventions.

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