Conflict in the Consumer Identity: The Coexistence and Consequences of Environmental Identity and Material Identity

By

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Abstract

While consumer research has commonly considered how identities influence consumer behaviour, there has been little research that considers how conflicting identities within the same individual influence their consumer behaviours. As such, there is significant scope for research examining how ideologically conflicting identities within a consumer influence their behaviour aligning with these respective identities.

To understand how conflicting identities influence consumption behaviour, this research considers the two higher-level identity standards of environmental identity (EID) and material identity (MID), where consumers with an EID feel a connection with and perceive importance in the natural environment, while consumers with a MID perceive importance in consumerist pursuits and material acquisition. Here, an EID is argued to guide an individual towards pro-environmental avenues of behaviour, while a MID will guide them towards consumerist avenues of behaviour. With the inherent conflict between the underlying ideologies around environmentalism and materialism, the coexistence of these identities will lead to conflicting meaning being presented to consumers. This research seeks to understand the coexistence between EID and MID within consumers, and their subsequent guidance towards pro-environmental and consumerist avenues of behaviour.

Data was collected using an online survey that also applied experimentally manipulated mortality salience and measured chronic regulatory focus to understand how they influence the relationship between EID and MID. Willingness to sacrifice to protect the environment, intentions toward voluntary simplification, compulsive buying and status consumption were also included to examine how the interaction between EID and MID influences guidance towards these behaviours. Following confirmation of validity and reliability within the measurement constructs, Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied to test the hypotheses. Findings showed that there was no relationship between EID
and MID, despite their conflicting ideologies. However, results also showed chronic prevention focus moderated the relationship between EID and MID, where a positive relationship was seen among those with a low chronic prevention focus, and a negative relationship among those with a high chronic prevention focus. Furthermore, within the control condition, a positive relationship was seen between EID and MID that was not seen among those with experimentally induced mortality salience. It was also shown that while MID had the ability to negatively moderate the guidance of EID, EID had no effect upon the guidance of MID, suggesting that a MID is dominant in guiding the self over EID.

This research contributes to our understanding of identity theory by showing that these identities can coexist within the self, and this is more likely among individuals with a low chronic prevention focus and without mortality salience. This coexistence is argued to relate to social forces that internalise environmental and materialistic ideals, in combination with consumers compartmentalising and selectively applying meaning from these identities to avoid the perception of conflict. Further, this research demonstrated that consumers with a chronic prevention focus will be more likely to recognise this conflict and have a reduced likelihood for coexistence between EID and MID. Finally, by showing the dominance of MID over EID in its ability to guide the self, this research provided practical implications for marketers who wish to encourage more sustainable consumption behaviours.
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Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give permission for the digital version of my thesis to be made available on the web, via the University’s digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Signed: _______________________

Date: 6th March 2019
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Sorry to anyone coming to this section hoping to see your name. There are far too many people in my life who I care about and I would truly hate to miss anyone so I’m not going to risk it and keep the names to a minimum.

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It’s 3am btw…. 
Chapter 1: Introduction

1.1 Research Background

Consumer researchers have often considered individual identity, and how consumers make decisions that are consistent with their sense of self (Escalas, 2013; Sirgy, 1982), where an identity is a cognitive schema, which provides a frame of reference to the self for interpreting experiences and reacting to the external environment (Stryker & Burke, 2000). Consumers construct narratives through the frames of reference from these identities using a series of symbolic meanings from resources and marketer-generated materials provided by the consumer marketplace in order to form a coherent but often diversified and fragmented sense of self (Arnould & Thompson, 2005). In seeking to extend the understanding of how consumers’ identities influence guidance towards different avenues of consumer behaviour, previous research has considered identity related concepts such as identity threat (Ward & Broniarczyk, 2011), identity consistency (Chugani, Irwin, & Redden, 2015), and identity conflict (Ahuvia, 2005). While there have been significant contributions to this research area, the diversity of identity goals and broader aspects of identity ensures this remains a fruitful area for ongoing research (Escalas, 2013).

This research applies the arguments of identity theory, which recognises the self is made up of multiple identities and that these identities have the ability to coexist within the self independently from one another (Bellucci, Sanders, & Serricchio, 2012), but they can also come into conflict (Stryker & Burke, 2000). It is similarly recognised that goals relating to an individual’s consumer behaviour can be marked by such points of conflict and internal contradictions (Arnould & Thompson, 2005), and that consumers will encounter many forms of conflict relating to the meanings and guidance framed by their identities when they engage
in decision making (Otnes, Lowrey, & Shrum, 1997; Thompson, 1996). While there has been some qualitative investigation of how consumer behaviours are applied as a means to address identity conflicts (Ahuvia, 2005), there remains significant scope for continued research in this area on how identity conflict influences an individual’s consumer behaviour.

Consideration has been given to the important role that conflicting meaning and ideology plays within the construction of consumer identities, where people perceive such conflicting meanings being expressed by others to juxtapose and provide an opposing point of reference to solidify their own ideals and sense of self (Luedicke, Thompson, & Giesler, 2009). While consumers seek consistency between their identities and the consumer behaviours they both pursue and avoid (Chugani et al., 2015; Sirgy, Grewal, & Mangleburg, 2000), there will be times when consumers engage in behaviours that conflict with their identities (Ward & Broniarczyk, 2011), and also times where different identities can frame antithetical meanings and ideology (Ahuvia, 2005; Otnes et al., 1997; Thompson, 1996). However, while consumers can internalise multiple identities that promote different paths of behaviour, no research has considered whether two ideologically conflicting identities can coexist independently within the self and the factors that influence the likelihood a consumer will have coexisting identities that guide conflicting avenues of consumer behaviour. Furthermore, it is not understood how two identities that present conflicting guidance will impact one another’s ability to influence consumer behaviours relevant to this conflict.

This research applies and advances identity theory within the area of consumer research to better understand when ideologically conflicting identities can coexist independently within the self. Furthermore, it illustrates the influence of their coexistence upon the broader directions of an individual’s consumer behaviour.
1.2 Research Context

To investigate the coexistence of ideologically conflicting identities and the resulting guidance of consumer behaviour, this research investigates higher-level identity standards, which frame higher order abstract meanings to the self and provide agency and guidance towards more specific behaviours that reflect these meanings (Tsushima & Burke, 1999). With the conflicting values and ideology presented within society influencing identity development and consumer behaviour (Holt & Thompson, 2004; Otnes et al., 1997), the consideration of conflicting higher-level identity standards provides a better understanding of how such conflict influences broader avenues of consumer behaviour.

With the application of higher-level identity standards, this research considers the higher-level meanings within materialistic and environmental ideologies, which have an inherent conflict based on the damage that consumption has upon the natural environment (Banerjee & McKeage, 1994; Kilbourne & Pickett, 2008). With environmental and materialistic ideals relevant to broader environmental and consumption behaviours, their joint consideration provides a better understanding of the broader direction of the consumer identity narrative. Furthermore, with the imperative of making meaningful steps towards sustainability and its link to individual consumption (Kilbourne, McDonagh, & Prothero, 1997; Ottman, 2017; Sheth, Sethia, & Srinivas, 2011), the consideration of materialistic and environmental ideology as the context for identity conflict within this research provides practical knowledge and implications for sustainability.

While the constructs of environmentalism and materialism has been considered together in the past (Hurst, Dittmar, Bond, & Kasser, 2013), the conflict between these constructs has not been investigated through the frame of identity theory. Materialism has been considered from multiple perspectives, which all relate to a common theme where individuals are driven to
consume, and seek a deeper meaning from consumption that is beyond the utility of the material goods themselves (Kilbourne & Pickett, 2008). Separately, environmentalism has also been considered from various perspectives, which are bound by the common theme that relates to a belief in the importance of the natural environment and the imperative to protect it (Pepper, 2019). These two broader themes are applied in the context of this research to be framed by two ideologically conflicting higher-level identity standards.

With conflicting ideals presented within society also reflected within consumers’ identities (Holt & Thompson, 2004), and environmentalism and materialism both encouraged by social forces within Western culture (Kasser, 2016; Kasser, Ryan, Couchman, & Sheldon, 2004; Kilbourne & Pickett, 2008), the combination of the broader meanings of these two distinct areas provides a practically relevant and important context by which to investigate the coexistence of two different higher-level identity standards that present conflicting ideologies. With the avenues of pro-environmental and consumerist behaviours framed by these identities, this research helps to understand how coexisting identities that present these conflicting ideologies influence the broader direction of an individual’s consumption behaviour. From this, the research considers environmental identity (EID) and material identity (MID) as higher-level identity standards that frame these conflicting areas of meaning.

1.3 Research Objectives

To begin to provide a better understanding of how theoretically conflicting higher-level identity standards can coexist within the self, and how this influences the broader direction of an individual’s consumption behaviour, this research seeks to address the question:
Do consumers have the ability to hold two ideologically conflicting higher-level identity standards within the self and how does their coexistence influence the guidance of consumption and environmental behaviour?

Drawing from consumer research and psychology literature, this thesis will develop hypotheses regarding the coexistence of environmental identity and material identity within the self and give consideration to the impact of chronic regulatory focus and experimentally induced mortality salience on the likelihood that these higher-level identity standards can coexist. The research will then investigate how the coexistence between these two higher-level identity standards will influence guidance of the self towards profligate consumerist and pro-environmental behaviours. Subsequently, the objectives of this research are:

1. To better understand the ability of consumers to hold the two ideologically conflicting identities of environmental identity and material identity within the self.
2. To understand the influence of chronic regulatory focus (an internal factor) and experimentally induced mortality salience (an external factor) on the ability of environmental identity and material identity to coexist within an individual.
3. To determine the ability of ideologically conflicting higher-level identity standards to interrupt the guidance of one another in relation to behaviours that are relevant to this conflict.

With materialism pro-consumption oriented and environmentalism anti-consumption oriented (Banerjee & McKeage, 1994), it would be expected that higher-level identity standards that frame such meanings will guide the self down opposing avenues of consumerist and pro-environmental behaviours. However, no research has been identified that has considered this interaction effect of conflicting identities upon such opposing avenues of behaviour. As such,
this research considers compulsive buying and status consumption as avenues of behaviour that will be guided by a material identity and investigates the impact that environmental identity has upon this guidance. Conversely, willingness to sacrifice to protect the environment (WTS) and voluntary simplification are avenues of behaviour that will be guided by an environmental identity and this research also investigates the impact that a material identity has upon this.

1.4 Research Methodology

Much of the existing consumer research relating to identity which has incorporated themes of conflict has applied qualitative methodologies (Arnould & Thompson, 2005; Holt & Thompson, 2004; Jensen Schau & Gilly, 2003; Murray, 2002; Otnes et al., 1997; Thompson, 1996). This research extends extant research by applying a quantitative methodology in order to explore the coexistence of ideologically conflicting higher-level identity standards and the subsequent consequences upon profligate consumerist and pro-environmental behaviours. While applying a positivist perspective to address the research objectives, this research utilised multi-dimensional latent factor scales using observed variables for the two higher-level identity standards of environmental identity and material identity, with unidimensional latent factors for the remaining constructs considered. These scales were organised within an online questionnaire that was distributed to the Australian general population.

Using the data collected, the measurement constructs were subject to validation and reliability testing using SPSS, AMOS, and Microsoft Excel. Finally, Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to test relationships and moderation effects of the latent variables using Smart PLS, with the results of these models providing the basis of the findings of this research.
1.5 Contributions of this Research

The core contribution of this research to marketing and consumer literature is an understanding of how two ideologically conflicting higher-level identity standards can coexist within consumers, and shows how this coexistence impacts broader avenues of pro-environmental and consumerist behaviours. While the notion of conflicting identities has been previously considered within psychology (Ahuvia, 2005; Brook, Garcia, & Fleming, 2008; Stryker & Burke, 2000; Stryker, Owens, & White, 2000; Suh, 2002) and consumer research (Ahuvia, 2005; Arnould & Thompson, 2005; Holt & Thompson, 2004; Otnes et al., 1997), there have been no studies on how ideologically conflicting higher-level identity standards are able to coexist within the same person and how they subsequently impact broader avenues of consumption behaviour. In line with the argument that the consideration of multiple competing identities will help understand the variance in individuals’ commitment to social movements (Stryker et al., 2000), this investigation of environmental identity and material identity helps to understand the outcomes of conflicting identities upon avenues of pro-environmental and consumerist behaviours. Consequently, this research provides theoretical contributions to identity theory, consumer research, and environmental sociology.

This thesis contributes to the advancement of identity theory within consumer research by showing the coexistence of identities that present conflicting ideologies is most likely when consumers have a weak chronic prevention focus and do not have mortality salience induced. This research further contributes by showing that while a material identity is able to negatively moderate the ability of an environmental identity to drive pro-environmental intentions, an environmental identity is unable to interrupt the ability of a material identity to guide profligate consumerist intentions. As such, this research also contributes by showing one type of identity being dominant over another type of identity in determining avenues of consumer behaviour.
1.6 Significance of the Thesis

By demonstrating dominance of material identity over environmental identity, this thesis also provides theoretical and practical significance relevant to sustainability, which is recognised as an increasingly important area (Chabowski, Mena, & Gonzalez-Padron, 2011). With the materialism encouraged within the dominant social paradigm argued as a potential barrier to ecological sustainability (Kilbourne & Carlson, 2008), this research also provides understanding towards the attitude-behaviour gap, where environmental knowledge and awareness does not necessarily translate to meaningful pro-environmental behaviour (Kollmuss & Agyeman, 2002). That is, by showing the ability of a material identity to interrupt an environmental identity’s guidance towards pro-environmental avenues of behaviour, this research sheds light on a barrier to ecologically sustainable avenues of consumption behaviour. Furthermore, by also showing that an environmental identity is not able to interrupt a material identity from guiding consumerist avenues of behaviour, this research contributes to identity theory by demonstrating that the ability of each identity to interrupt the other’s guidance is not equal, where one identity can be dominant in guiding behaviour that represents conflict.

Within psychology literature there has been research into identity and self-consistency, which has investigated the psychological effects of inconsistency within the self as it relates to well-being (Brook et al., 2008; Cross, Gore, & Morris, 2003; Suh, 2002). However, there has been limited investigation that has considered the factors that influence such inconsistency. As such, by investigating the influence of chronic regulatory focus as an internal personal attribute and experimentally induced mortality salience as an external situational factor, this research provides insight into the factors that influence the likelihood of coexistence between two conflicting higher-level identity standards within a consumer. By showing the influence of mortality salience and chronic regulatory focus on the likelihood of coexistence of these
ideologically conflicting identities, this research also provides practical implications for marketers who wish to create a more consistent guidance from a singular identity by limiting the potential interruption of a separate conflicting identity.

1.7 Thesis Structure

*Chapter 1* provides an introduction to the research area, which considers the coexistence of conflicting higher-level identity standards and the subsequent influence on avenues of consumer and social behaviour with a brief description of the research objectives and methodology applied to address them. It subsequently highlights the contributions of this research relating the coexistence of conflicting higher-level identity standards.

*Chapter 2* reviews the literature from the fields of consumer research and psychology that is relevant to identity theory and role of identity within consumer pursuits of symbolic meanings within multiple avenues of behaviour. The chapter begins with a background of identity within consumer research and argues the importance for continued research within this area. It then extends to the more specific consideration of conflicting higher-level identity standards and presents environmental identity and material identity as two ideologically conflicting higher-level identity standards of which a better knowledge of their coexistence will assist in understanding broader avenues of pro-environmental and consumerist behaviours. The chapter also presents mortality salience and chronic regulatory focus as factors that will likely have an impact of the ability for these two higher-level identity standards to coexist within the self and argues their additional theoretical and practical depth to the conceptual framework.

*Chapter 3* takes the concepts presented in chapter 2 and applies them in order to present a series of research hypotheses designed to understand the relationship between environmental identity and material identity and the impact that mortality salience and chronic regulatory focus has
upon this relationship. The chapter also presents a series of outcome variables that are argued to relate to broader avenues of behaviour that should be guided by environmental identity and material identity and hypotheses upon the moderating effects that each identity will have in its ability to interrupt the guidance of the other. The chapter concludes with an outline of the proposed conceptual framework.

**Chapter 4** presents the research method. This includes an outline and justification of an online questionnaire, the measurement scales applied within it, the sampling process, and the quality assurance processes. This is followed by an outline of the data cleansing process with SPSS, and the presentation of the congeneric measurement models that were created within AMOS with further results processed within Microsoft Excel to assess the validity and reliability of the measurement models ready for hypothesis testing. The chapter concludes with a justification of and description of PLS-SEM to address the research hypotheses.

**Chapter 5** presents the results of hypothesis testing, which was done primarily with the application of moderation analysis using PLS-SEM. These models are used to conclude upon the relationship between environmental identity and material identity as well as the moderation effects of mortality salience and chronic regulatory focus upon this relationship. The models are also used to determine the guidance of environmental identity and material identity towards the outcome variables and conclude upon the ability of each of these identities to influence the other’s ability to guide the self towards these avenues of behaviour, hence addressing the research question.

**Chapter 6** concludes upon the research findings and discusses them in conjunction with the existing literature. The theoretical and practical contributions of the research are outlined as well as the limitations of the research. Finally, the avenues for future research following from these initial findings are outlined followed by the conclusion to the thesis.
Chapter 2: Literature Review

2.1 The Consideration of Identity within Consumer Research

The arguments of identity theory have been applied and interpreted across multiple academic disciplines (Stryker & Burke, 2000). This has included frequent consideration within consumer behaviour and marketing literature where possessions, purchasing and acquisition behaviours have been heavily connected to identity, where consumers construct narratives of identity by pursuing and acquiring material possessions and resources within the consumer marketplace (Arnett, German, & Hunt, 2003; Arnould & Thompson, 2005; R. Belk, 1988; Escalas, 2013; Reed II, 2004; Sirgy, 1982). Within this area, it has been commonly noted that a person will engage in purchasing and acquisition behaviours based on their self-identities where such behaviours are seen to be congruent with and representative of the underlying meaning presented by those identities (Ahuvia, 2005; Escalas, 2013; Reed II, 2004). Research has also begun to explore how identity related concepts such as identity threat, identity consistency and identity conflict impact consumption behaviour (Ahuvia, 2005; Chugani et al., 2015; Holt & Thompson, 2004; Ward & Broniarczyk, 2011).

This section will first give a background into the construct of identity and how this has been considered in marketing and consumer research and then expand upon this to argue the importance of further consideration of how conflict between two different identities within the same individual can impact broader avenues of consumer behaviour.

2.1.1 Identity Theory and the Consumer Identity Narrative

This research applies the construct of identity as conceptualised by identity theory, where an ‘identity’ is a cognitive schema of internally stored information and meaning that is framed to
self as a means to interpret experiences, react to the external environment, and by which one can understand who they are (Stryker & Burke, 2000). However, this research also recognises that identity theory can be applied in conjunction with the concepts of social identity theory to allow a more complete understanding of how identities are constructed and operate within the self and society (Stets & Burke, 2000). In contrast to the more general term ‘identity’, social identity theory considers an individual’s ‘social identity’, which is an identity that specifically relates to perceived membership with a particular group, and subsequently influences intergroup behaviours (Hogg, 2006). As such, it is also important to consider the roles that social entities and social movements play in the construction and maintenance of identity.

The construct of the self is core to understanding the construct of identity, where the self is the holistic collection of a consumer’s thoughts and feelings of them as an entity or being (Sirgy, 1982). That is, the self is a singular component at the very highest level of abstraction of what constitutes a consumer and their conscious thought. An identity presents a frame of meaning to the self that enables the self to interpret and respond to the external environment in a way that is consistent with the meanings and standards that are framed by that identity (Stryker & Burke, 2000). The self is constructed of multiple such identities that provide self-meaning, self-verification, agency and guidance as to the specific behavioural roles that person plays within their social environment (Stryker & Burke, 2000; Tsushima & Burke, 1999).

The self is made up of multiple different identities which become internalised through interaction with multiple social environments (Stryker & Burke, 2000). With the prevalent market forces that consumers are exposed to, the consumer marketplace plays an important role in the construction and maintenance of these identities (Arnould & Thompson, 2005). Identities guide behaviours within the environments where they are formed, and consumers make purchases that are congruent with the meanings and role expectations framed by these identities (Kleine III, Kleine, & Kernan, 1993). As such, when individuals are exposed to the
consumer marketplace, they construct identities that provide a frame of meaning as to how to interpret and react to what is presented within this marketplace. These identities will subsequently lead to consumer behaviours that are reflective of self-important meaning in the construction of a consumer identity narrative (Arnould & Thompson, 2005).

While guiding the self towards consumer behaviours that are framed as congruent with the self, an identity will also guide a consumer away from behaviours that are seen to be in conflict with the frame of meaning presented by that identity (Ward & Broniarczyk, 2011). Not only does acquisition of goods congruent with an identity provide self-verification and self-esteem, but also the rejection of goods framed as incongruent (Banister & Hogg, 2004). As such, an identity will guide the self towards consumer behaviours that are seen to align with desired self-meaning, and away from those that are seen as incongruent with the self (Sirgy et al., 2000). For example, many men avoid wearing pink as they associate it with femininity and consequently such clothing is seen as incongruent with the masculine meaning from their male identity. Differently, they might wear a black leather jacket to symbolise strength and rebellion, as these are important meanings framed by their masculine male identity.

The conceptualisation of identity has been extended into the consideration of consumer identity projects where consumers construct narratives of identity using resources provided by the consumer marketplace (Arnould & Thompson, 2005). These narratives involve acquisition of products and services that are congruent with the self from a utility sense (Sirgy et al., 2000), but just as importantly they relate to how consumers align with the symbolic meanings they perceive from these acquisitions (Elliott & Wattanasuwan, 1998; Kozinets, 2001; Schouten, 1991) as well as the companies and organisations that provide them (Bhattacharya & Sen, 2003). Prior research of such identity narratives has also looked at how consumers associate with non-commercial entities in society, such as their identification with non-for-profit organisations and their willingness to donate, which presents an opportunity to self-verify one’s
own moral virtue and express this virtue within their social environment (Arnett et al., 2003; Reed, Aquino, & Levy, 2007).

With their interaction with the consumer marketplace, an consumer will develop identity narratives in response to this marketplace even if they lack the ability and resources to actively participate (Arnould & Thompson, 2005). That is, the self will be forced to react to these marketplace forces and internalise identities that will present methods by which to respond to them, even if they don’t have the financial strength to pursue the material acquisitions marketed. For example, there are sub-cultures of consumers who develop identities based on anti-consumption and rejecting the materialism promoted by the consumer marketplace (Cherrier, 2009). While it might not always be a lack of financial strength that leads to the construction of anti-consumption identities, such identities do require the consumer marketplace to be internalised within the self, as they are constructed in opposition to the dominant ideals of this consumer marketplace (Iyer & Muncy, 2009).

With the vast array of resources and positions available to individuals within the consumer marketplace, consumerist culture will inevitably have a significant impact upon the construction and maintenance of a consumer’s identities (Dittmar, 2011). While some consumer identity narratives may involve the rejection of specific products and brands (Banister & Hogg, 2004), there will also be others that construct their identity narratives by rejecting the ideology of consumerist culture as a whole (Iyer & Muncy, 2009). In both cases this requires exposure to the meanings presented by the consumer marketplace, where identities are constructed to guide the self in response to these meanings. With the inherent connection between the consumer marketplace and the construction of a diverse array of consumer identities that guide different consumption behaviours, identity remains a fruitful concept for ongoing consumer research (Escalas, 2013).
2.1.2 Symbolic Meaning in the Construction and Maintenance of Consumer Identities

A unique component of human nature is the quest to seek meaning and an identity provides a frame for this meaning and an understanding of one’s own existence. Possessions and material acquisitions have been recognised to also provide this meaning, and are often considered by consumers as extensions of the self (R. Belk, 1988). The connection between identity and behaviour has also been recognised to relate to the shared meaning between that identity and the behaviour (Burke & Reitzes, 1981). From this perspective, identities provide the conduit between consumer behaviours and the symbolic meanings that material possessions present to the self. This symbolic meaning has been recognised in marketing literature (Banister & Hogg, 2004; Elliott & Wattanasuwan, 1998; Schouten, 1991). Therefore, the ongoing consideration of identity in consumer research offers a good avenue for understanding of how self-relevant meanings guide a vast array of consumer behaviours.

An identity guides attitudes, intentions and behaviours that serve as a means of self-verification by pursuing self-relevant meaning in a given environment (Swann Jr, 1983). Consumer literature has commonly recognised the meaning and symbolism that possessions provide to enable self-verification in the construction and maintenance of identity (Ahuvia, 2005; Arnould & Thompson, 2005; R. Belk, 1988; Elliott & Wattanasuwan, 1998; Escalas, 2013). For example, when someone has an internalised identity of a supporter of a football team, they verify their sense of self through purchasing tickets to attend team games, dressing in team apparel and have team symbols within their home. Thus, the consumer is able to understand who they are through the meaning that is shared between these behaviours, and resources provided within the consumer marketplace enable them to do this. In the construction of the consumer identity narrative, possessions can be seen as extensions of the self that are able to confirm to a consumer who they are and express this to their social environment (R. Belk, 1988; Berger & Heath, 2007; Escalas & Bettman, 2005). People will also avoid things that
frame opposing meaning to their identities, and this can extend to avoidance of consumerism in general with identities that reject consumerist culture (Kozinets & Handelman, 2004).

Within the consumer marketplace, there is a wide range of different positions that consumers can choose to occupy (Arnould & Thompson, 2005). Such positions can involve a complete rejection of the dominant ideals promoted by this marketplace, as is seen within anti-consumption identities (Cherrier, 2009). For example, voluntary simplifiers reject consumerism as they see that the pursuit of material goods as something that is environmentally destructive and takes away time from more important things in life (McDonald, Oates, Young, & Hwang, 2006). While voluntary simplifiers reject the ideals of the consumer marketplace, such an identity is still dependent upon the existence of the consumer marketplace to develop as an adversary in response to it. As such, in addition to the rejection of specific products and brands, it can also be the higher order meaning that is perceived from the consumer marketplace that is rejected in the construction and maintenance of identity. Therefore, such an identity presents meaning at a higher level of abstraction where it frames a rejection of consumerism.

From the above, consumption behaviours can be predicted though the meanings that they share with identities. While it can be predicted how a single identity should guide a consumer, consumers are constructed by multiple identities (Levy & Reeves, 2011), and it is not currently clear how multiple different identities will interact to impact consumer behaviour. As such, there is significant room for additional research into how interaction between different identities will impact the guidance of consumer behaviour.

2.1.3 Multiple Identities upon the Guidance of the Self

In the search for meaning, the self will construct multiple identities that present different roles and guide different behaviours (Brook et al., 2008). With these multiple identities, they can be
well integrated together within the core self, or as more differentiated fragmented components of the self (Donahue, Robins, Roberts, & John, 1993). Such different identities can coexist independently of one another within the self, and can also often complement one another (Risse, 2004). However, with these multiple identities there will also often be conflict between the meaning and guidance they present to the self (Adler & Adler, 1987; Ahuvia, 2005; Holt & Thompson, 2004; Stryker & Burke, 2000). It is also recognised that there will be conflicts between a consumer’s identities around consumption behaviours (Ahuvia, 2005; Ward & Broniarczyk, 2011), and that perceptions of conflict play an important role within identity related consumption (Luedicke et al., 2009). It is important to also note that even if different identities present conflicting meanings, they may still be able to coexist separately and be salient within the self at different times (Roccas & Brewer, 2002). Within this thesis, the term coexistence relates to when a consumer holds two different identities within the self, however, this does not necessarily mean both are always salient (see section 2.1.4 below).

Much of the research on the impact of identity on consumption behaviours has considered a singular component of identity within the self. For example, considering the Star Trek fan identity and how it impacts a consumer’s behaviours that are relevant to this identity (Kozinets, 2001). This has also been considered from the perspective of marketing for non-material meanings, such as the ability of a moral identity to guide charitable behaviours (Reed et al., 2007). While such research has provided understanding as to how a single identity guides consumer behaviours (Escalas, 2013; Kozinets, 2001; Luedicke et al., 2009), as the self is constructed of multiple such identities, there is significant room for further research that considers how different identities operate with or against each other within the guidance of consumption behaviours.

The investigation of conflicting identities has been argued to provide insight into the variation in commitment to social movements (Stryker et al., 2000). By extension, conflicting meanings
between identities should also help to explain the variation in commitment to avenues of consumption behaviour. As such, for a better understanding in this area there needs to be more research into how different identities coexisting within the self will interact in the guidance of consumption behaviours, particularly when such identities can present conflicting meaning and guidance.

2.1.4 Identity Salience as an Indicator for Guidance of the Self

Internalised identities are typically considered to be organised within the self on a hierarchy of salience (Arnett et al., 2003). The salience of an identity refers to how important the meanings, cognitions and behaviours of that identity are in one’s definition and understanding of them self (Callero, 1985). For example, one of the most salient identities held by people is that of their gender and the role expectations held by this identity will commonly be active across many situations (Thompson, 1996).

The more committed a consumer is towards the social environment and relationships connected to an identity, the greater salience that identity will have within the self (Stryker, 1987). One source of identity conflict might be when a consumer is exposed to two different social environments, and as a consequence guidance of the self becomes difficult to predict with the salience of two identities that are likely to provide different guidance to the self around the customs and norms of those social environments (Roccas & Brewer, 2002). In the case where commitment to the social environment or relationship is higher, the corresponding identity should have greater salience and subsequently guide the self, however, if the importance of the commitments and subsequent identity salience are relatively similar, it will be difficult to predict the guidance of the self (Stryker & Burke, 2000).
2.1.5 Conflicting Meanings within the Consumer Identity Narrative

While a salient identity will guide the self towards consumer behaviours that align with the meanings framed by that identity (Berger & Ward, 2010), there will also be times when people engage in consumer behaviour that is incongruent with an identity. For example, in the case of purchasing a gift for another individual, one might experience identity threat when the gift purchased is incongruent with a salient identity of theirs (Ward & Broniarczyk, 2011). This leads to a compensatory process where the consumer experiencing identity threat will indicate greater affiliation with the threatened identity and greater intentions towards identity congruent products (Gao, Wheeler, & Shiv, 2008).

The meaning that is sought through avenues of consumption will change throughout life (Schau, Gilly, & Wolfinbarger, 2009). When consumers do go through transitions to the salience of their identities, the changing commitment to these identities will impact the time they have for other identities (Adler & Adler, 1987). For example, athletic freshmen enter university expecting to balance their social, academic and sporting identity commitments, but this leads to time conflicts, which can weaken salience of one of these identities (Adler & Adler, 1987). Thus, the competing demands of these identities can force the consumer to choose between them.

The above example refers to conflict where these separate identities compete for the resource of time, and as such could be referred to more accurately as identity competition. However, another source of conflict can relate to the meanings and ideals presented by different identities (Holt & Thompson, 2004). For example, gay Christians can experience conflict between the meanings presented by their sexual identity and their religious identity (Levy & Reeves, 2011). With symbolic meanings and ideals recognised as providing the connection between identity and consumer behaviours (Arnould & Thompson, 2005), it is within this area of conflicting
meanings rather than competition for resources that is most relevant to consumer research. As such, this research will focus upon conflicting meanings presented by different identities and the impact that this has on the direction of a consumer’s identity narrative.

There has been qualitative consideration of how different identities people hold that present conflicting meanings will combine to influence their consumption decisions (Ahuvia, 2005; Thompson, 1996). However, with the depth of understanding that the investigation of conflicting identities can provide, the notion of identity conflict within consumer behaviour remains under researched.

Considering the conflict that the self can experience through the meanings of different consumption behaviours (Chugani et al., 2015; Ward & Broniarczyk, 2011), the important role of conflict within the consumer identity narrative (Luedicke et al., 2009) and the suggestion that identity conflict can provide a better understanding of social behaviours (Stryker et al., 2000), investigating conflicting meanings presented by different identities will provide further depth and contrast to knowledge on how identity impacts consumption. With the lack of current research on this, there is a large area of untapped understanding with regards to when, how and why conflicting identities impact broader avenues of consumption behaviour.

2.1.6 The Application of Higher-Level Identity Standards to Investigate Conflict

It is not just within the meaning of specific material goods that construct the consumer identity narrative, but broader avenues of consumption behaviour that will present meaning at a higher level of abstraction. For example, different identities that present broader ideologies relating to technology have been conceptualised, and these identities will impact how consumers pursue or avoid technology products (Kozinets, 2007). If someone has an identity that frames technology as a good thing at the pinnacle of human progress, then that person may also
identify as a Samsung Galaxy user to explicitly express the standards framed by that identity at a lower level of abstraction. They may also insist on using a Toshiba laptop with Intel i7 CPU, obtaining high speed Internet, and watch everything on Netflix in high definition on their 4K Samsung smart TV. While each of these consumer behaviours have their own specific meaning, symbols and utility at a lower level of abstraction, together they relate to that consumer’s identity as a ‘techtopian’, which will guide a broader avenue of behaviour within their consumer identity narrative (Kozinets, 2007).

It is important not only to consider how identity influences consumption by the meaning and utility such behaviours provide at a lower level of abstraction, but also to understand how broader meanings and ideology influence consumption behaviour (Kozinets, 2007). It is recognised that there are higher-level more abstract identities that provide overriding agency for the construction of more concrete lower level identity goals, and these are referred to as higher-level identity standards (Tsushima & Burke, 1999). For example, someone who has a general caring and appreciation of nature may also identify as a recreational gardener and environmental activist who buys environmentally friendly products. Here, the more abstract meaning and principles of the higher-level identity standard (appreciation and caring for nature) provide the agency for more specific behaviours (gardening and green consumption).

It has been argued that with investigation of conflict in the guidance of the self, consideration of higher sociological level abstract traits over more concrete traits will provide a better understanding of this conflict (Stryker & Macke, 1978). From this, with the broader meaning and ideology they frame to the self, higher-level identity standards will also provide greater room for conflict. As such, this research will investigate conflicting higher-level identity standards to provide a better understanding of broader avenues of consumption behaviour.
It should be noted that while this research context specifically considers higher-level identity standards, sometimes the terms ‘identity’ and ‘higher-level identity standard’ will be used interchangeably. That is, they both share a significant area of cross over within their definitions, which enables them to be applied together in such a way. However, within this research the term ‘higher-level identity standard’ is considered as a concept that can be quantitatively applied with a more specific and encompassed definition, which subsequently enables a more robust and accurate measurement within a quantitative research method.

Within this context by which this research investigates conflicting higher-level identity standards, it is important to distinguish higher-level identity standards from values. While both are considered as higher order constructs held within the self, a higher-level identity standard is at a level of abstraction above that of values. Values are a set of beliefs as to what a consumer considers important, and are linked with stable self-schema and identity constructs (Eccles & Wigfield, 2002). Differently, higher-level identity standards frame broader meaning to a consumer as to who they are, and this meaning does involve abstract goal states such as values, beliefs and ideals (Tsushima & Burke, 1999). Therefore, values can be considered a part of the abstract goal states presented to the self by a higher-level identity standard, where they are linked with the overriding meaning but at a lower level of abstraction. For example, a consumer may have ‘Christian values’ of the importance of charity and kindness to others. At a higher-level of abstraction within the self, that individual will have a higher-level identity standard of them as a ‘Christian’. This higher-level identity standard will frame these Christian values in combination with a range of other abstract meanings and goal states such as faith in the higher being of God, belief in biblical stories, and a perceived duty to live by certain rules in order to gain entry to heaven. Here the Christian values are just a part of a range of higher order meanings and ideology relating to the overriding Christian higher-level identity standard.
A similar distinction can also be made between conflicting values and identity conflict. As it is a construct at a higher-level of abstraction, a higher-level identity standard can frame multiple values, and could itself frame conflicting values. Extending the previous example, the Christian identity can present values of both forgiveness and divine retribution, which are values inherently in conflict. Differently, that Christian may also identify as a gay man, which relates to a separate identity within the self that presents a distinct range of meanings, some of which will conflict with the meanings of the Christian identity (Levy & Reeves, 2011).

2.1.7 The impact of Identity Threat on Consumer Behaviour

Identity theory recognises that the self is constructed of multiple and often fragmented identities and that there will be conflict between them (Arnett et al., 2003). As consumers will seek consistency in the meanings presented to the self (Cross et al., 2003), inconsistent meaning from different identities will present as a threat. By extension, consumers will seek consistency with their consumption behaviours based on their identities (Chugani et al., 2015). Furthermore, the ability of different higher-level identity standards to present conflicting meanings can present a source of self-threat that results in compensatory consumption behaviour (Holt & Thompson, 2004). Therefore, as consumers seek consistency between their identities, conflict between higher-level identity standards and the avenues of behaviour they motivate should present an identity threat, which will lead to compensatory consumption behaviours (Chugani et al., 2015; Gao et al., 2008; Ward & Broniarczyk, 2011).

Compensatory consumption is applied as a means of self-affirmation (Sivanathan & Pettit, 2010). As compensatory consumption aims to reaffirm an identity (Ward & Broniarczyk, 2011), if the source of identity threat is the conflicting guidance of two different identities, it
will be difficult for the self to engage in consumption decisions that share meaning with both identities to address the threat as it is the conflicting meaning that is the cause of the threat.

While there has been some recognition of the effects of conflicting meaning upon avenues of consumer behaviour (Ahuvia, 2005; Chugani et al., 2015; Holt & Thompson, 2004), it is still largely unclear how conflicting meanings presented by two different higher-level identity standards will impact these broader avenues. With the depth of knowledge that investigation of conflicting identities can provide and the suggestion that it will assist in better understanding variability in social behaviours (Stryker et al., 2000), consideration of identity conflict in the field of consumer research remains largely untapped. As such, this research will consider conflicting meanings presented by different higher-level identity standards and how they influence broader avenues of consumption behaviour.

2.2 Identity Conflict upon Broader Avenues of Consumer Behaviour

2.2.1 Extending the Consideration of Identity Conflict into Consumer Research

At some level, consumers will encounter conflict within the self every day. When someone is torn between different paths of behaviour, it can be argued that they are experiencing identity conflict where the underlying identities are attempting to guide the self in different directions (Adler & Adler, 1987). For example, when someone is deciding whether to go out with friends or stay home and spend time with their family. Here there are two salient identities in competition within the self (‘friend’ and ‘family member’), where it is difficult to adequately perform the role expectations of both identities. More understanding and knowledge within this area with regards to what impacts the guidance of consumers will assist marketers within the strategies they develop. That is, there will be conflict between identities that guide different
avenues of consumption behaviour and a better understanding of what influences the outcomes of such situations will assist marketers to encourage consumers down the desired path.

When conflict exists between two identities and one identity has a greater salience than the other, then the more salient identity should determine the behavioural path, and in situations where the salience of each identity is low, each identity should provide little self-relevant meaning with little motivational force from either identity (Stryker & Burke, 2000). However, when two conflicting identities have a high level of salience, the inability for all expectations to be satisfied will lead to confusion and stress where behaviours are difficult to predict (Burke, 1991; Wiley, 1991).

One pathway by which identities can come into conflict is through a lack of resources required to satisfy the obligations of multiple identities (Brook et al., 2008). Commonly, this can stem from time constraints that prevent someone from performing the behaviours from each identity as they would like (Burke, 1991). Conflict may also arise from identities that have been internalised not because they are congruent with the self but rather as a means to increase feelings of self-worth or avoid feelings such as shame, guilt, inferiority etc. (Soenens & Vansteenkiste, 2011). Such identities will not be congruent with the underlying core self, are based on extrinsic motivations and do not properly satisfy the basic needs of the self (Soenens & Vansteenkiste, 2011). For example, when a child is pressured by their parents into a profession they don't like, the resulting identity will be inconsistent with their core self.

Another noted pathway for identity conflict, and the area where this research will focus, is where the meanings, values and ideals framed by different identities are inconsistent or contradictory to one another (Burke, 1991). In this situation, it is not that there are insufficient resources to satisfy the obligations of each identity, but when the behaviours guided by one of the identities are contradictory to the ideals of the opposing identity. For example, it has been
shown that young men raised by single mothers in lower socioeconomic communities will internalise a strong feminine identity from their mothers, and the guidance of this feminine identity will then conflict with the ideals and meanings of the masculine identity they wish to project in their social circles, and the conflicted men will consequently be prone to violence as a means of masculine protest (Whiting, 1965). In this situation, the conflicting ideals of masculinity and femininity present identity conflict within the self. When someone possesses two such salient identities that present incongruent meanings, this should lead to confusion within the self, rather than the consistent self-verification desired, and the resulting path of behaviour resulting from this identity conflict will be difficult to predict and provides a rich area for ongoing research (Stryker & Burke, 2000).

Although there has been a lot of theorising on identity conflict (Burke, 1991; Soenens & Vansteenkiste, 2011; Stryker & Burke, 2000; Stryker et al., 2000), there has been limited research that has enabled a better understanding of the outcomes of two conflicting identities within consumer research. Arguably some of the most relevant findings has been investigation of gender and sexuality identity conflict across different contexts (eg. Levy & Reeves, 2011; Wade, 1996; Whiting, 1965). This research will expand upon such existing research and provide a better understanding of identity conflict by considering two higher-level identity standards that should theoretically motivate opposing avenues of consumption behaviour.

With regards to existing consumer research relevant to identity conflict, there have been qualitative findings that suggest consumers demarcate, compromise or synthesise within their consumption behaviours as a means to create a coherent narrative around their conflicting identities (Ahuvia, 2005). It has also been argued that two conflicting cultural expectations internalised as identity standards can lead to compensatory consumption to support a third identity to address such conflict among American men (Holt & Thompson, 2004). However, there are currently no quantitative studies identified that have investigated two conflicting
higher-level identity standards and how these influence the guidance down broader avenues of consumption behaviour.

When a consumer becomes aware of inconsistency within the self they will seek self-repair mechanisms by which they will try to reaffirm their sense of self (McGregor, Zanna, Holmes, & Spencer, 2001). Compensatory consumption behaviour has been shown as a method of self-affirmation (Sivanathan & Pettit, 2010) and when someone experiences identity threat they will seek to sure up their sense of self through consumption behaviour (Ward & Broniarczyk, 2011) and be motivated towards certain products to reaffirm their self-view (Gao et al., 2008). As such, existing research suggests that when there is inconsistency within the self, a consumer will engage in compensatory self-affirmation techniques designed to reaffirm their sense of self, which have been shown to involve consumption behaviours.

As conflicting identities will translate to inconsistency within the self, similar compensatory processes will occur when someone experiences conflict between two identities. With consumption behaviour a common compensatory avenue by which a consumer can reaffirm their sense of self (Gao et al., 2008; Sivanathan & Pettit, 2010) and possessions a means by which to express identity (R. Belk, 1988; Berger & Heath, 2007; Escalas & Bettman, 2003), self-affirming consumption behaviours may be sought when there are two conflicting identities within the self. It has already been noted that consumption behaviours are applied to reaffirm an identity as a result of a threat to the self (Townsend & Sood, 2012) and consumers have been argued to engage in compensatory consumption as a result of conflicting ideologies (Holt & Thompson, 2004). However, this has not been investigated from the perspective of two higher-level identity standards that guide opposing avenues of consumption behaviour.
2.2.2 Identity Conflict and Commitment to Social Movements

Research into identity conflict has been argued to offer deeper understanding into the variability of participation and commitment towards social movements (Stryker et al., 2000). Identity salience has also been argued to explain why people join social movements, and where someone possesses an identity that aligns with a social movement they will need to weigh up commitment with potentially countervailing identities (McAdam & Paulsen, 1993). From this, a better understanding of the perceptions of conflict between different identities will not only provide a better understanding of consumption behaviour, but also help understand what influences a consumer’s social behaviours. With the application of morality an important component in the construction of identity narratives (Cherrier, 2006; Luedicke et al., 2009; Reed et al., 2007), and social movements presenting an avenue by which consumers can express their morality (Cherrier, 2007; Reed et al., 2007), commitment to social movements will also impact avenues of consumption behaviour.

An understanding of the effect of conflict upon consumption behaviours will also help marketers to encourage more desirable social behaviours. For example, investigation of pro-environmental behaviours from the perspective of identity conflict may help address the unexpected findings relating to the weak ability of environmental attitudes to lead to pro-environmental behaviours (Stets & Biga, 2003). That is, a consumer may have an identity that cares for the natural environment but may also have a separate identity that prevents a reliable commitment to pro-environmental behaviours. For example, resistance to more environmentally sustainable lifestyles may be the result of an identity threat posed by more sustainable travel behaviours (Murtagh, Gatersleben, & Uzzell, 2012). With the prominence of pro-environmental sentiment within modern marketing strategies (Ottman, 2017), and the importance of preserving the natural environment (Tietenberg & Lewis, 2016), this is an
example of a practical area where a better understanding of identity conflict will assist marketers develop more effective strategies to guide environmentally sustainable consumption.

A consumer’s perception of morality is an important influencer on the avenues of behaviour they pursue, where certain behaviours are seen as being in conflict with their identity (Kozinets, 2007; Luedicke et al., 2009). Often such conflicts are recognised through a perception of inauthenticity within modern consumerist culture and the negative impact it can have on personal well-being, society and the natural environment (Luedicke et al., 2009). As such, conflict that consumers can perceive in the construction of their identities can relate to injustices seen in consumerist ideology and this perception of the immorality of consumerism can influence their consumption decisions (Luedicke et al., 2009). For example, voluntary simplifiers reject consumerism and materialism and perceive moral superiority in areas such as environmental advocacy (Ballantine & Creery, 2010). While some will significantly reduce their consumption based on identities that reject consumerist culture (Cherrier, 2009; Iyer & Muncy, 2009), the consideration consumerist ideology presents a good opportunity for research on conflicting higher-level identity standards.

2.3 Conflicting Ideologies Leading to Identity Conflict

2.3.1 Ideology Relating to Consumerism

In the construction of their identities, consumers can often perceive conflict between their own identities and inherent meanings within mainstream consumerism (Luedicke et al., 2009). The argued flaws in consumerist ideology often relate to the damaging effects that materialism can have upon personal well-being (Burroughs & Rindfleisch, 2002; Dittmar, 2007b), society (Bauer, Wilkie, Kim, & Bodenhausen, 2012), and the natural environment (Kilbourne & Pickett, 2008). A consumer can also have personal conflict with specific avenues of
consumerism. For example, some people have identities that frame an ideology against
technological advancements and will subsequently avoid new technology products (Kozinets, 2007). From a broader perspective, there are many segments of anti-consumerist sentiment within modern Western society, and this is reflected in anti-consumer identities (Cherrier, 2009). As such, some consumers develop identities that conflict with consumerist culture.

In contrast to these negative social sentiments towards consumerism, there are also many social forces that encourage consumerist behaviours as a means towards a better life (Dittmar, 2011), and the desire to engage in the buy-use-dispose consumption culture has been suggested as universal (Droge, 1995). Governments often reinforce the macroeconomic perspective that consumption is a good thing that drives economic prosperity (Kasser, 2006). Furthermore, forces in the social environment, such as commercial marketing that encourages consumption as a means to improve consumers’ quality of life are ingrained within a dominant social paradigm (Kilbourne et al., 1997). However, while there are social forces that encourage consumption, there are also people who recognise the damage that such consumption has upon the natural environment (Iyer & Muncy, 2009).

While the arguments in the preceding paragraphs cover only a few that have been made against and for consumerism, they represent a contrasting duality of opposing perspectives of how consumerist ideology can be perceived. As such, there is an existing conflict within society on the ideology relating to consumerism. This will provide consumers with the conflicting social instruction to be frugal within a society that encourages profligacy (Kilbourne, Beckmann, & Thelen, 2002). With the prevalence of consumerist meanings people are exposed to (Kasser, 2006), this duality for and against consumerism will play an important role in the construction of consumers’ identities and subsequent consumption behaviours.
There are consumers within society that construct identities which frame consumption as something that damages individual well-being, society, and the environment, as is seen with voluntary simplifiers (Cherrier, 2009). There are also consumers that construct identities that frame consumption behaviours as central to life, and as a means towards happiness and success where the acquisition of resources within the consumer marketplace is seen as a means to obtain the ideal self (Dittmar, 2011). As such, there will be people that have identities that frame ideology in favour of the consumer marketplace, and also identities that frame ideology against it, and these will subsequently influence broader avenues of consumption behaviour.

While consumers will internalise identities based on meanings in society presented around consumption, the self is often constructed with non-integrated fragmented identities (Donahue et al., 1993), and these fragmented identities can present conflicting meaning. Separate compartmentalisation of different identities also presents a means by which consumers avoid conflict between those identities (Levy & Reeves, 2011). From this, the conflicting ideologies presented within society relating to the benefits of consumerism may often result in the construction of different compartmentalised identities that present conflicting meanings relating to consumption behaviours.

Conflicting meanings presented in society will create conflicting identities within the members of that society. For example, there is a noted conflict within American culture, where American men need to earn a wage as a cog within a collective industrialised bureaucracy, while at the same time have the aspirations to be self-made, rebellious and independent (Holt & Thompson, 2004). As such, there are inherently conflicting ideals within the social paradigm which are internalised as conflicting higher-level identity standards resulting in a ‘man-of-action hero’ identity, where compensatory consumption behaviours are applied to avoid perception of stigmas from the conflicting ‘breadwinner’ and ‘rebel’ identities (Holt & Thompson, 2004).
As such, conflicting meanings presented by society is reflected in different identities where the conflict between them influences consumption behaviours.

While explicit investigation of conflicting identities on consumption behaviours is limited, there is evidence that consumption is applied as a means by which individuals address conflicts between their underlying identities (Ahuvia, 2005; Holt & Thompson, 2004). However, as outlined above, there will be consumers that have internalised different identities that frame conflicting ideology around the benefits of consumption. As such, while consumption and acquisition behaviours are applied by consumers to reconcile identity-threat, the broader ideology surrounding such behaviours may also be a cause of identity-threat. For example, someone might hold an identity that frames a caring towards the natural environment and a separate identity that enjoys 4-wheel driving. As large vehicles produce emissions which are argued to damage the environment, this presents an area of conflict. However, while compensatory consumption behaviour can result from internal conflict, it is not known how avenues of consumption behaviour will be impacted by coexisting higher-level identity standards that conflict on consumerist ideology.

### 2.3.2 Conflict between Environmental and Materialistic Ideology

A topical ideological conflict in the current day relates to the negative impact consumption has upon the natural environment. There is a recognised essential tension between environmentalism and consumption culture (Droge, 1995), and it is well publicised that human consumption is a major contributor to environmental issues such as climate change, deforestation, accumulation of garbage and waste, and the depletion of rare natural resources (Szargut, Ziebik, & Stanek, 2002). From this, there is a fundamental conflict between the
ideologies of environmentalism and materialism, with materialism being pro-consumption and environmentalism being anti-consumption (Banerjee & McKeage, 1994).

Despite the conflict between environmentalism and materialism, there are forces in Western society that encourage the construction of identities that are sensitive towards the ideologies of both, leading to different identities that frame these conflicting ideologies (Autio, Heiskanen, & Heinonen, 2009). That is, while consumption is recognised to be a cause of environmental degradation (Jorgenson, 2003), people are both encouraged to engage in consumerist behaviours (Dittmar, 2011; Kilbourne et al., 1997) and also to care for and preserve the natural environment (Dunlap, Van Liere, Mertig, & Jones, 2000). As consumers construct identities that reflect the meanings they are exposed to in their social environment (Stryker & Burke, 2000), these opposing ideologies presented within society will result in conflicting identities. One of these identities will guide consumers toward profligate consumption and material acquisition (Dittmar, 2011), while the other will guide them towards caring for and protecting the natural environment (Clayton & Opotow, 2003).

With social forces encouraging both materialism and environmentalism, and conflicting identities argued to explain variance in commitment to social movements (Stryker et al., 2000), a better understanding of this conflict within consumers will provide understanding of the variance in commitment to environmentally sustainable behaviours. That is, such research will help understand if an identity that will guide the self to engage in pro-environmental behaviour will be interrupted by an identity that guides the self to engage in profligate consumerism, and vice versa. While salient, these identities will motivate the self in opposing directions, and it is not currently clear how this will impact the resulting guidance of the self toward avenues of environmental and materialistic behaviours.
Relevant to this area of research, environmental and materialistic values have been noted as being in conflict (Banerjee & McKeage, 1994; Kilbourne & Pickett, 2008) and materialism is argued to present many avenues to conflict with other values within the self (Burroughs & Rindfleisch, 2002). By considering the constructs of environmentalism and materialism from a conflicting values perspective, these previous studies have limited the consideration of these avenues of behaviour to the more concrete definitions of personal values. With the contribution that an understanding of conflicting identities can provide to the variance in social behaviours (Stryker et al., 2000), and the primary purpose of this thesis to provide a better understanding of conflicting identities, identities that conflict based on materialistic and environmental meanings will enable a topical context that can be contrasted with previous findings.

There have been multiple conceptualisations of materialism, including as a consumer value orientation (Richins, 2004; Richins & Dawson, 1992), a personality trait (Belk, 1985), and as identity goal pursuits (Shrum et al., 2013). As a consumer value orientation, materialism is recognised as a multidimensional construct where possessions and material pursuits are seen as a means to success, happiness and central to life (Richins, 2004). Similarly, as a personality trait materialism is conceptualised as consisting of the sub-dimensions of possessiveness, non-generosity, and envy, where such personality traits serve as drivers for profligate consumerism (Belk, 1985). More recently, it has been argued that materialism should be conceptualised as identity goal pursuits, where it relates to the construction and maintenance of the self through acquisition (Shrum et al., 2013). This latter conceptualisation is suggested as a means to both expand and simplify the concept of materialism and consolidate the shared intended meaning. Similarly, this research applies the broader shared theme from these conceptualisations, where materialism relates to a multi-faceted construct within the self that motivates decadent consumerist behaviours, where consumers seek more than the utility or instrumental value from material acquisition (Kilbourne & Pickett, 2008). It is under this broader abstract theme in
Research investigating the drivers of pro-environmental behaviours has also applied a broad range of concepts relating to environmentalism. These have included environmental concern (Minton & Rose, 1997), environmental attitudes (Grob, 1995), environmental knowledge and awareness (Kollmuss & Agyeman, 2002), environmental values (Kempton, Boster, & Hartley, 1996), and the satisfaction of intrinsic psychological needs (Kasser, 2009). All such concepts involve the overriding theme where the individual considers the natural environment as an important entity that needs to be protected, and its importance has been broken down to motivations that relate to egoistic, altruistic or biospheric orientations (De Groot & Steg, 2008; Stern, Dietz, Abel, Guagnano, & Kalof, 1999). Here, egoistic refers to an indirect concern for the environment based on a concern for oneself, altruistic refers to an indirect concern based on care for other people, and biospheric refers to the direct care and concern an individual has for the natural environment. It is down this biospheric avenue of meaning in which this research is focussed, as it relates directly to caring for the natural environment as an entity in its own right, and consequently provides meaning that will be framed by an identity that will conflict with broader materialistic meaning framed by a different identity.

While there have been various conceptualisations and applications of materialistic and environmental ideologies, their consideration within this research relates to the broader areas of abstract meaning they represent, and how their conflicting meaning can be framed by two different identities within a single consumer. While materialism (Shrum et al., 2013) and environmentalism (Hinds & Sparks, 2008) are recognised as constructs that are inherently connected with identity, their conflicting meanings have not been researched from the basis of
identity theory. The primary purpose of the application of the broader areas of meaning from these two concepts is to provide a context for new research that will provide a better understanding of identity conflict and how this can influence broader avenues of consumption behaviour, contributing to both identity theory and consumer research. The conceptualisation of the two specific higher-level identity standards will be discussed in 2.4.1 and 2.4.2.

Relevant to this research context, it has been argued that the inability for environmental behaviours to result from environmental attitudes may come from disparate attitudes (Blake, 1999; Kollmuss & Agyeman, 2002). As such, with the conflicting ideologies of materialism and environmentalism promoted within society, this may result from identity conflict within consumers and inhibit sustainable consumption behaviour. This research will provide contrast to this through a better understanding of conflicting higher-level identity standards on a consumer’s intentions down environmental and materialistic avenues of behaviour.

From the above, some consumers will have two different internalised identities that will present conflicting ideology with regards to environmentalism and materialism. With materialism being pro-consumption and environmentalism anti-consumption (Banerjee & McKeage, 1994), both identities should guide opposing avenues of consumption behaviour. As materialism and environmentalism are more abstract constructs with broad applications, researching the conflict between such identities will provide insight into how such conflict can impact broader avenues of consumption behaviours and provide insight into variation of commitment towards pro-environmental behaviours.
2.4 Identity Development around Consumerism and the Natural Environment

2.4.1 The Development of Environmental Identity

Research and theory into environmental motivation and behaviours has given increasing consideration to the important connection between the natural environment and the self (Clayton & Opotow, 2003; Devine-Wright & Clayton, 2010; Fritsche & Häfner, 2012; Stets & Biga, 2003). Furthermore, there is a significant role nature plays in the development of identity (Clayton & Opotow, 2003), and identity theory provides an important avenue for ongoing research that will help to better understand environmental sociology and pathways toward more ecologically sustainable behaviours (Devine-Wright & Clayton, 2010; Stets & Biga, 2003).

Identity theory notes that a consumer’s external environment is an integral factor when developing an identity (Twigger-Ross & Uzzell, 1996). With nature being a significant component of a consumer's external environment, and identities being developed throughout life, interactions and experiences with nature provide a powerful external force that the self will use in identity development (Clayton & Opotow, 2003). Camping trips, bush walks, starting a vegetable garden, observing an animal in the wild, watching the sunset, listening to the rain etc., will all provide experiences where the self will be able to interpret meaning from the natural environment. The resulting assimilation of such meaning into the self will lead to the internalisation of an ‘environmental identity’ that will act as a future frame for guiding beliefs, attitudes and behaviours relating to the natural environment (Clayton & Opotow, 2003). Importantly, an environmental identity will also guide attention toward environmental threats (Devine-Wright & Clayton, 2010).

From interactions with nature, a person will develop a degree to which they are able to use the natural environment to define their own existence and to interpret meaning in response to
nature (Hinds & Sparks, 2009). Within this process that person will often come to see the natural environment not only as an entity that provides resources which support life, but also as an important moral entity in its own right (Clayton & Opotow, 2003). By extension, an environmental identity also frames a caring towards nature and an obligation to protect it (Clayton & Opotow, 2003).

Another important component of environmental identity is a feeling of connection between the self and nature (Clayton & Opotow, 2003; Fritsche & Häfner, 2012). From this, the individual feels as though they are a part of rather than separated from the natural environment. As such, those who consider themselves as a part of the natural environment should have a stronger environmental identity, while those that consider themselves as separate from or superior to the natural environment will have a weaker environmental identity.

Important to the internalisation of an identity is also how well social structures and groups support the formation of that identity (Stryker & Burke, 2000). As such, an environmental identity will be more likely to be formed within social environments that encourage a caring for and protection of nature (Clayton & Opotow, 2003). With the importance of the natural environment being given increasing attention within mainstream public discourse (Dryzek, 2013), the salience of identities as they relate to nature should be increasing as such identities will be receiving increasing social support (Devine-Write & Clayton, 2010). With this, environmental identity should be considered an important area for future research and consideration of environmental sociology from the perspective of identity theory will assist in addressing gaps in past research (Devine-Wright & Clayton, 2010; Stets & Biga, 2003). Furthermore, this will further assist marketers with strategies relating to green marketing and sustainability, which has become an important area of marketing (Ottman, 2017).
An environmental identity involves a caring for the natural environment as a whole as well as environmentalist sensitivities that encourage the protection of the environment (Clayton & Opotow, 2003). With the vast size and extent of entities within and relating to the natural environment, an environmental identity will present a broader area of meaning, which will guide specific environmental behaviours. As such, an environmental identity should be considered as a higher-level identity standard.

It has been noted that specific conceptualisations of identity will enable better predictions of fewer specific behaviours, while a broader identity will be able to predict a greater range of behaviours (Devine-Write & Clayton, 2010). Thus, as a higher-level identity standard, an environmental identity will be relevant to a larger range of behaviours, which will include environmentally sustainable consumption behaviour.

Environmental identity can be distinguished from environmental values as it exists at a level of abstraction higher within the self. Someone’s values are best described as to their beliefs on what is important, moral, desirable and just (Kempton et al., 1996), and environmental values refer to those values that specifically relate to the importance of nature (Schultz, Shriver, Tabanico, & Khazian, 2004). Differently, an environmental identity is a higher order cognitive schema that provides a holistic frame of reference with regards to the meaning the self perceives from the natural environment. An environmental identity will frame all the meanings the self perceives from the natural environment, such as feelings of spiritual sustenance from nature, experiencing enjoyment from nature, feeling alignment with environmentalists, having an appreciation for nature, and feeling as a part of nature rather than separate from it (Clayton & Opotow, 2003). For example, a man with an environmental identity may experience happiness from the smells of spring, pontificate ideologies of environmentalists, enjoy camping, feel empathetic pain when he sees animals suffering, and pass on values of appreciating and caring for nature to his children. Here, the environmental identity provides
the overriding higher order cognitive schema within the self that enables the perception of all these meanings, including the outwardly expressed meaning in their environmental values that they pass on to their children.

There have been a number of theoretical papers and empirical studies with varying research perspectives that consider the concept of environmental identity (Fritsche & Hafner, 2012; Hinds & Sparks, 2009; Hinds & Sparks, 2008, Clayton & Opotow, 2003; Stets & Biga, 2003). However, there are few, if any, articles that consider environmental identity in consumer research. Despite this, there is empirical evidence to support that an environmental identity will guide the self toward pro-environmental behaviours and intentions (Hinds & Sparks, 2008). As such, an environmental identity will be a driver of more environmentally sustainable consumption. As consumption reduction is an important component of more sustainable consumer behaviour (Peattie & Peattie, 2009), an environmental identity will also conflict with an identity that promotes profligate consumption.

To summarise, an environmental identity is a higher-level identity standard that is internalised through a combination of interactions with nature and society, which frames perceptions of a broad range of positive meanings from the natural environment to the self. In framing a caring for nature an environmental identity will also motivate more environmentally sustainable avenues of consumer behaviour, and by extension promote more frugal consumption levels. However, there needs to be more understanding of how an environmental identity can impact consumer intentions and behaviours. This research will begin to investigate this within the context of identity conflict with a separate higher-level identity standard that will encourage environmentally unfriendly profligate consumption behaviours.
2.4.2 The Development of Material Identity

Identity has been commonly connected to material consumption and acquisition (Arnould & Thompson, 2005; R. Belk, 1988; Dittmar, 2007a, 2011; Escalas, 2013; Reed II, 2004; Wilska, 2002). It is well recognised that consumption is used to both externally express an identity while simultaneously providing a sense of self through the pursuit of consumer resources that align with self-important meanings that are framed by salient identities (Dittmar, 2011; Escalas & Bettman, 2005; Reed II, 2004; Sirgy, 1982). Furthermore, the consumer marketplace and connected social entities encourage ideals that drive the pursuit of the material resources they offer (Arnould & Thompson, 2005; Dittmar, 2011; Kasser, 2003). As such, there are many social forces that will encourage the internalisation of an identity that drives the pursuit of material resources from the consumer marketplace.

Within the consumer marketplace, there are meanings presented by which consumers will construct narratives of identity even if they don’t have the means to pursue the resources that are offered (Arnould & Thompson, 2005). By extension, consumers will not just construct identities using the resources provided by the consumer marketplace, but they will also construct identities in response to the broader meanings presented within that marketplace. For example, voluntary simplifiers oppose consumerist ideology, and their identities are formed as a rejection of consumerism (Ballantine & Creery, 2010; McDonald et al., 2006).

Previous research has identified both consumers who engage within excessive material consumption (Dittmar, 2005a; Koran, Faber, Aboujaoude, Large, & Serpe, 2006; O’Guinn & Faber, 1989) and also those who make conscious efforts to consume little (Ballantine & Creery, 2010; Kozinets & Handelman, 2004; McDonald et al., 2006). As such, there are general dispositions towards consumption, from which an consumer will make more concrete consumption decisions. As concrete behaviours are guided by more abstract meaning that is
presented by a higher-level identity standard (Tsushima & Burke, 1999), a general disposition toward consumption will relate to a higher-level identity standard.

Materialism is often conceptualised as a consumer value orientation where a consumer will consider the acquisition of material resources as central to life, and a pathway to happiness and success (Richins & Dawson, 1992). Marketing and social forces that encourage consumption within Western society have been argued to heavily internalise materialistic ideals within the social actors exposed to these messages (Kasser et al., 2004). When such social forces internalise principles within the self that subsequently provide the agency for more concrete social behaviours, this relates to the internalisation of a higher-level identity standard (Tsushima & Burke, 1999). This higher-level identity standard will be internalised in consumerist cultures and will guide consumers to pursue a better life through the acquisition of material resources from the consumer marketplace, i.e. a ‘material identity’.

To understand the concept of material identity as a higher-level identity standard, this research considers the concept of materialism, which enables a broad range of theoretical and empirical understanding (Shrum et al., 2013). As argued in section 2.3.2, materialism has been conceptualised from many perspectives, is a multidimensional abstract construct (Richins, 2004), that relates to identity goal pursuits (Shrum et al., 2013), and is a recognised driver of consumption, purchasing and acquisition (Podoshen & Andrzejewski, 2012; Rindfleisch, Burroughs, & Denton, 1997; Yurchisin & Johnson, 2004). Such identity goals relating to the purchasing of material products will involve concrete behaviours such as the purchasing a specific brand of handbag (Kim, 2013). A material identity frames overriding meaning to the self, which provides the agency to engage in such concrete consumption behaviours. For example, someone with a material identity may experience feelings of excitement in a shopping mall, gloat about their ability to make extravagant purchases, feel personal pride from their shoe collection, have specific brands they use to express themselves, and teach their children
to value money and possessions as important in life. Here, the material identity is the
overriding cognitive schema that provides a frame of reference by which the self can perceive
all these meanings, while their teaching their children the importance of money and possessions
relates specifically to the materialistic values within this broader frame of reference.

Materialism has been recognised to vary its accessibility to the self and can be activated through
making salient to that consumer concrete triggers such as luxury products or lotteries (Bauer et
al., 2012; Kim, 2013). It has also been shown to become active through psychological distress
such as insecurity and mortality salience (Arndt, Solomon, Kasser, & Sheldon, 2004; Kasser
& Sheldon, 2000). As such, materialistic orientations can be activated by triggers in a
consumer’s external environment, just as an identity is (Forehand, Deshpandé, & Reed II,
2002), which supports materialism being framed by a material identity.

To summarise, a material identity is a higher-level identity standard that provides a broad frame
of reference that enables consumers to perceive positive meanings from the consumer
marketplace and the resources it provides. This broader frame of reference will include
materialistic values, where the acquisition of material resources is associated with success,
happiness and perceived as central to life (Richins, 2004).

2.4.3 Conflict between Material Identity and Environmental Identity

The self internalises multiple identities via interaction with the external environment, and these
different identities can also be reflective of conflicting ideals presented within a consumer’s
cultural environment (Holt & Thompson, 2004; Stryker & Burke, 2000; Stryker et al., 2000).
Combining this with the notions that there is a prevalence of cultural forces that encourage
material acquisition (Dittmar, 2011; Kasser, 2003), and increasing attention is given to the
natural environment relating to environmental caring and protection (Dryzek, 2013), there are
likely to be many consumers who have internalised both a material identity and an environmental identity within cultures that promote both ideologies.

A material identity will frame materialistic ideology and guide the self to consume material resources. Human consumption threatens the natural environment (Hoekstra & Wiedmann, 2014; Holdren & Ehrlich, 1974), and materialistic ideology makes it difficult to pursue environmental sustainability (Kilbourne & Carlson, 2008; Kilbourne & Pickett, 2008). With materialism pro-consumption oriented and environmentalism anti-consumption oriented, there is an inherent conflict between these ideologies (Banerjee & McKeage, 1994). Hence, there will be conflict between environmental identity and material identity.

As an environmental identity involves a caring for and an obligation to protect the natural environment, it will also discourage behaviours that damage it (Clayton & Opotow, 2003). As such, the damage that human consumption has on the natural environment will present an area where environmental identity and material identity conflict in their guidance. That is, the underlying meanings of the environmental identity should motivate frugal consumption behaviours as a means to protect the natural environment, while those of the material identity should motivate profligate consumption and acquisition. As these higher-level identity standards will guide opposing avenues, they provide a good context by which to better understand how identity conflict can influence broader avenues of consumption behaviour.

Identity conflict provides an important area for research that will contribute toward a better understanding of the variability in commitment to social movements (Stryker et al., 2000). Identity theory and consideration of an environmental identity will also help to better understand pro-environmental behaviours (Stets & Biga, 2003). Combining these suggestions with the argued barriers to ecologically sustainable behaviour relating to materialism within the dominant social paradigm (Kilbourne & Carlson, 2008), investigation of the coexistence
between environmental identity and material identity within consumers will provide insight into the variability in commitment to pro-environmental behaviours. For example, this will provide a better understanding of the attitude behaviour gap, where pro-environmental attitudes have been shown to not necessarily translate well to pro-environmental behaviours (Kollmuss & Agyeman, 2002).

It has also been suggested that post-materialist values, will relate positively to pro-environmental values and behaviours (Salonen & Ahlberg, 2013), which are at the core of an environmental identity (Clayton & Opotow, 2003). It has similarly been argued that the forces promoting materialism within the dominant social paradigm do present a significant barrier to ecologically sustainable consumption behaviour (Kilbourne & Carlson, 2008; Kilbourne et al., 1997), but this requires further investigation. As such, this research will investigate the ability of a material identity to conflict with an environmental identity in the guidance toward more profligate and pro-environmental avenues of consumption behaviour.

2.5 The impact of External and Internal Factors on Identity Conflict

With the many identities a consumer possesses, without an understanding of how a particular identity becomes salient in various situations it will be difficult to determine when that identity will guide the self (Reed II, 2004). Identity conflict will occur between salient identities, and there are internal and external factors that affect identity salience for response to marketing stimuli (Mercurio & Forehand, 2011; Oyserman, 2009).

When a consumer has conflicting identities, they can deal with this by rejecting one of these identities as a means of maintaining consistency (Levy & Reeves, 2011). However, the fragmentation of identities also allows them to be internalised while avoiding the conflicting meanings being presented to the self (Donahue et al., 1993). Extending previous arguments on
the importance of internal and external factors that can affect identity salience (e.g. Mercurio & Forehand, 2011; Oyserman, 2009), it will be important to understand such internal and external factors that influence the ability of conflicting identities to coexist within consumers. To provide deeper understanding and practical applicability, consideration will also be placed on factors that will impact the ability of material and environmental identities to coexist. This will also provide an understanding of when the ideologically conflicting identities are likely to impact the ability of one another in the guidance of the self.

While this research will investigate how the coexistence of material identity and environmental identity will influence avenues of consumer and pro-environmental behaviours, a primary goal is to begin to provide a better understanding of what occurs when a consumer has ideologically conflicting identities that should guide opposing directions of behaviour. As such, investigation of factors that are proposed to have an impact upon the coexistence of conflicting identities will provide a contribution through greater understanding of the underlying mechanisms that are associated with identity conflict. As will be outlined in the following sections and in the next chapter, the additional factors to be considered, ‘mortality salience’ and ‘regulatory focus’, are applicable to the broader notion of identity conflict.

2.5.1 Mortality Salience and Terror Management Theory

Mortality salience refers to a consumer's present awareness of their own inevitable death. Investigation of the psychological effects and behavioural impacts of mortality salience is based in terror management theory and involves the experimental manipulation of making people aware of death (Burke, Martens, & Faucher, 2010; Greenberg et al., 1990; Kasser & Sheldon, 2000; Pyszczynski, Greenberg, & Solomon, 1999), and observation of the effects of mortality salience in culture (Arndt et al., 2004; Bonsu & Belk, 2003). Terror management
theory posits that when mortality is salient, the self will apply coping mechanisms to divert the resulting terror (Fritsche & Häfner, 2012; Greenberg et al., 1990).

The effects of mortality salience have previously been associated with identity (Bonsu & Belk, 2003; Halloran & Kashima, 2004; Schmid & Argo, 2007). When one considers the inevitability of their own mortality the self will undergo a quest for meaning and self-affirmation in order to reduce the self-threat (Schmeichel & Martens, 2005). A fundamental underlying theme from identity theory relates to our inherent quest to seek self-affirmation, and identities are able to provide this (Burke & Stets, 1999). Thus, both the effects of mortality salience and the development of identity relate to self-affirmation.

As triggering of mortality salience presents life within the physical self as finite, the self will often seek meaning in order to transcend from this idea (Schmeichel & Martens, 2005). With our natural survival instinct, whereby we have an inherently strong desire to exist, mortality salience provides a challenge to the self with the awareness that we will one day die (Jonas, Schimel, Greenberg, & Pyszczynski, 2002). It is from this challenge to a consumer’s self-concept where identity becomes inherently connected with mortality salience. That is, following mortality salience an individual will seek a strong self-affirming worldview (Burke et al., 2010), and it is through the frame of an identity that such a worldview will provide self-affirmation (Halloran & Kashima, 2004). The self can also seek either literal or symbolic meaning that will enable the perception of extension of the self following the death of the physical body (Dechesne et al., 2003). As such, if a consumer possesses an identity that also enables this perceived extension of the self, this will be more likely to be made salient.

As mortality salience will result in seeking self-affirmation (Schmeichel & Martens, 2005) and self-esteem (Burke et al., 2010), which are also sought during identity construction (Vignoles, Regalia, Manzi, Gollledge, & Scabini, 2006), it could also be argued that mortality salience
plays a role in how identities are internalised and maintained throughout life. To support this, there is evidence of mortality salience changing the self-importance of an consumer’s identities where it results in changes in connection to self-important possessions (Schmid & Argo, 2007).

From the above, mortality salience is inherently connected with the concepts of self and identity. As a something that is typically externally induced via experimental manipulation, which influences internal cognitions relating to self-reflection (Burke et al., 2010), it provides an appropriate factor by which to consider the coexistence of conflicting identities.

2.5.2 Mortality Salience and Identity Conflict

One effect of mortality salience is that it leads to a stronger conviction towards one’s ideals and worldviews (Burke et al., 2010; Greenberg et al., 1990). This is based in the idea that when one perceives their life as a finite concept they will seek a solidified understanding of who they are and to distinguish themselves from others in order to find meaning within a life that will ultimately end (Burke et al., 2010). As such, following mortality salience a person will seek to sure up a stronger understanding of exactly who they are. Perceived inconsistencies in meanings presented to the self will lead to confusion, uncertainty and stress, and a noted source for such inconsistency is different identities that frame conflicting meanings (Suh, 2002). As two identities that frame conflicting ideology to the self will not provide the feelings of consistency sought following mortality salience, it is not yet understood how mortality salience will impact the coexistence of such conflicting identities within the self.

Identities that present conflicting ideals will result in uncertainty within the self (Suh, 2002), and when a consumer perceives such uncertainty they will apply a process of compensatory conviction, where they will have increased conviction towards a particular worldview (McGregor et al., 2001). Compensatory conviction also follows mortality salience, leading to
clarified values and more self-consistent goals (McGregor et al., 2001). As values and goals are core sub-components of an identity (Hitlin, 2003), compensatory conviction following mortality salience should lead to greater consistency within one’s identities. However, it has not been investigated how mortality salience influences the coexistence of identities that frame conflicting ideology to the self.

From the preceding paragraphs, identity is a major determining factor in the motivational outcomes following mortality salience. In the context of this research, consideration of the coexistence of material identity and environmental identity in the presence of mortality salience will provide further understanding of when they are able to coexist, and hence when conflicting identities will be likely to influence the guidance of consumer behaviours.

2.5.3 Mortality Salience and the Natural Environment

The impact of mortality salience on pro-environmental behaviours and consumers' motivation to protect the environment has been considered within previous research (Fritsche & Häfner, 2012; Vess & Arndt, 2008), and there are arguments for mortality salience both weakening motivation to protect the environment (Fritsche & Häfner, 2012), and also arguments for it strengthening pro-environmental motivations (Fritsche, Jonas, Kayser, & Koranyi, 2010; Vess & Arndt, 2008).

As people often seek to alleviate the terror of mortality salience through perceptions of symbolic immortality of the self (Burke et al., 2010), when one is aware that one day their physical body will die, one coping mechanism is to seek to associate the understanding of their self as a part of external entities or ideas that they believe will live on. Extending from this, it has been argued that people may seek to disassociate the idea of their self to nature because they associate nature with biological mortality and such thoughts provide no comfort (Fritsche...
& Häfner, 2012; Vess & Arndt, 2008). Also, often people within advanced economies consider themselves as superior to nature and as such disassociate from nature (Vess & Arndt, 2008). Mortality salience can also result in stronger perceptions that humans are distinct from animals, and a stronger disgust for biological things such as breastfeeding (Cox, Goldenberg, Arndt, & Pyszczynski, 2007). It has also led to people having a greater preference for manmade over natural landscapes (Koole & Van den Berg, 2005). Such evidence suggests that mortality salience reduces a person's affinity towards the natural environment.

While some studies have shown mortality salience will often weaken a consumer’s connection to nature, it has also been shown that mortality salience increases environmental concern for those who obtain self-esteem from the natural environment (Vess & Arndt, 2008). These findings align with the notion that those who experience mortality salience seek sources of self-esteem as a means to alleviate the negative effects (Burke et al., 2010). As such, it has been shown that mortality salience can also have a positive impact on the self toward nature, and these effects could be argued to be dependent on the salience of that consumer’s environmental identity. Currently, there has been initial consideration in this area that has shown environmental identity removes the negative effects mortality salience has upon motivations to protect the natural environment (Fritsche & Häfner, 2012).

### 2.5.4 Mortality Salience and Materialism

Studies have shown that mortality salience will commonly trigger materialistic tendencies (Arndt et al., 2004; Kasser & Sheldon, 2000; Mandel & Heine, 1999). Following the induction of mortality salience consumers have been shown to have greater excitement towards the idea of finding money (Solomon & Arndt, 1993), greater attraction toward luxury items (Mandel & Heine, 1999), greater future personal fiscal expectations and increased greed toward scarce natural resources (Kasser & Sheldon, 2000).
When someone is faced with their own inevitable demise, they will seek to reaffirm who they are to alleviate the negative psychological affects (McGregor et al., 2001) and the goal to affirm who one is, is as an important component of identity (Stryker & Burke, 2000; Swann & Hill, 1982). It has been recognised in consumer behaviour literature that consumers will look to construct and maintain identities through consumer behaviours (Arould & Thompson, 2005; Escalas, 2013). As such, materialistic tendencies following mortality salience could be argued to relate to a consumer seeking to reaffirm their sense of self through material pursuits. For example, it has been shown that materialistic consumers will experience a greater connection to brands following mortality salience (Rindfleisch, Burroughs, & Wong, 2009).

Extending this argument, materialistic tendencies following mortality salience may also be the result of the self being oriented towards materialistic ideals that are internalised by social forces (Dittmar, 2011; Kasser & Sheldon, 2000). With social forces within modern economies that encourage the pursuit of wealth and possessions and marketing communications promoting the pursuit of the ideal self through consumerism (Dittmar, 2011), there will be many people with identities that frame pursuits of wealth and material acquisition, which been suggested as a reason why mortality salience leads to materialistic motivations (Arndt et al., 2004).

To summarise, mortality salience is an important consideration within this research context from its fundamental connection to identity and its ability to encourage the self to seek consistency. Furthermore, while mortality salience does not directly relate to materialistic and ecological ideals, it has been shown to influence the level to which they are applied. As mortality salience should encourage consistent goals within the self (McGregor et al., 2001), its inclusion in the investigation of conflicting identities should provide further theoretical and practical understanding into when identity conflict can occur and how to influence this.
2.5.5 Regulatory Focus Theory

Furthering our understanding of the factors that impact on the coexistence of conflicting identities, we give consideration to a consumer’s regulatory focus orientation. Regulatory focus theory considers the two motivational orientations of promotion focus and prevention focus (Higgins, 1997, 1998). A promotion focus depicts approaching desirable outcomes through accomplishments and aspirations (Higgins, 1998). When someone has a promotion focus, they will be motivated towards activities that are aimed at leading to a desired outcome. For example, a student may study hard because they are motivated to get good enough grades to get into their desired university course. Differently, a prevention focus depicts the avoidance of negative outcomes by focussing on obligations, safety and responsibilities (Higgins, 1998). When a person has a prevention focus, they will be motivated towards behaviours that are aimed at preventing undesirable outcomes. For example, a different student might study hard as they fear failing their exam and not living up to their parent’s expectations.

Regulatory focus theory is connected to identity theory in that it evolved from ideas that considered discrepancy between a consumer's actual, ought and desired self (Higgins, 1987). A promotion focus is said to result from when there is a perceived discrepancy between the actual self and the ideal self, where the consumer is motivated toward their ideal self. This leads to an activated promotion focus as that person is motivated towards hopes, wishes and aspirations to become their ideal self. When the actual self becomes congruent with the ideal self it represents a positive outcome and when the actual self fails to become congruent with the ideal self this results in an absence of positive outcomes (Crowe & Higgins, 1997). Actions aimed at creating this congruence between the ideal and actual self relate to a promotion focus. A prevention focus stems from an intent to prevent discrepancies between a consumer's actual self and their ought self, which relates to obligations, safety, duties and responsibilities.
Maintaining congruence between the ought self and the actual self represents an absence of negative outcomes, while discrepancies between a consumer's ought and actual self represents a negative outcome. When a consumer is motivated to avoid these discrepancies they are motivated by a prevention focus (Crowe & Higgins, 1997).

As with identity, regulatory focus orientation has been considered as both an inherent individual trait referred to as a ‘chronic regulatory focus’ (Higgins, Shah, & Friedman, 1997), and also as a temporarily state that can be triggered by situational contexts (Shah & Higgins, 1997). This same consideration has been given to internalised identities in that they are both a chronic and enduring component held within the self that can be triggered in contexts relevant to that identity (Reed II, 2004). The ability of a regulatory focus to be triggered is dependent upon the chronic regulatory focus of that consumer (Faddegon, Scheepers, & Ellemers, 2008; Higgins, 2000). To be triggered and impact behaviour, that regulatory focus should be readily accessible within that person (Higgins et al., 1997), and people are far more sensitive to triggers that fit their chronic regulatory focus orientation (Higgins, 2000; Lockwood, Jordan, & Kunda, 2002). It is also argued that the chronic and inherent component of regulatory focus has a more enduring effect than momentary shifts (Johnson & Yang, 2010).

2.5.6 Regulatory Focus and Identity Conflict

Identity theory posits that people are motivated towards behaviour that is seen to align with the self through the frame of an identity (Stryker & Burke, 2000). As such, both regulatory focus and identity are concerned with the motivations that are guided by perceptions of the self, where an individual is motivated to attain and maintain congruence between the self and desired meaning within the external environment.
It has been argued that the negative psychological effects that can result from identity conflict can relate to discrepancies between a consumer’s ought and actual self (Brook et al., 2008). Regulatory focus theory posits that consumers with a prevention focus will be guided towards removing such discrepancies between their ought and actual selves (Higgins, 1998). As conflicting identities within the self should present such discrepancy (Brook et al., 2008), it might be argued that in their focus to remove discrepancies between their ought and actual selves that people with a chronic prevention focus will be less susceptible to internalising different identities that can present conflict. However, this has not been empirically tested.

Further relevant to identity conflict, it has been recognised that consumers with a chronic promotion focus will not be as vigilant in scanning for mismatches in their goals (Zhu & Meyers-Levy, 2007). As conflicting identities will present conflicting goals to the self, this argument could be extended to suggest that a consumer with a promotion focus will be less likely to recognise conflict between their identities, which will enable conflicting identities to coexist within the self. Once again, this has not been empirically investigated.

Despite the connections between regulatory focus and identity, currently there have only been a few select studies identified that have considered regulatory focus together with identity (e.g. Faddegon et al., 2008; Johnson & Yang, 2010). It has been found that when an individual identifies with a particular social identity, this individual will likely internalise the regulatory focus that they associate with the relevant social in-group (Faddegon et al., 2008). It has also been suggested that various forms of commitment are related to an interplay between self-identity level and regulatory focus (Johnson & Yang, 2010). However, no study exists that will provide insight into how different orientations of regulatory focus will impact the coexistence of conflicting identities. This research will consider the influence of chronic regulatory focus and an internal factor to help better understand how conflicting higher-level identity standards can coexist within the self.
2.6 Conclusion

This chapter has reviewed an avenue of consumer research literature that considers the influence of identity upon consumption behaviour. It has drawn on identity theory to highlight the importance of undertaking further research to consider how different identities within the same self, that can present conflict, can influence the guidance down broader avenues of consumption behaviour. Environmental identity and material identity were presented as higher-level identity standards that are commonly constructed in consumers within Western culture that present conflicting ideologies to the self. Consequently, research into the coexistence of these higher-level identity standards will provide insight into how conflicting identities influence the broader and conflicting avenues of pro-environmental and consumerist behaviours. Finally, it presented the concepts of mortality salience and regulatory focus as factors that may influence the likelihood of coexistence between these ideologically conflicting higher-level identity standards.

The next chapter will apply these concepts introduced within this chapter with the research question and hypotheses to better understand the coexistence of environmental identity and material identity within the self and how their coexistence can influence a series of outcome variables relating to broader avenues of pro-environmental and profligate consumerist behaviours.
Chapter 3: Research Question and Hypothesis Development

3.1 Introduction

The previous chapter reviewed the literature on the role of identity in influencing consumer behaviour and highlighted the lack of empirical research that investigates the coexistence of two ideologically conflicting higher-level identity standards within the self, and how this might influence broader avenues of pro-environmental and consumerist behaviours. It was argued that consideration of an environmental identity (EID) and a material identity (MID) will provide a good context to investigate the impact of such ideologically conflicting identities upon the guidance upon an individual’s consumer and environmental behaviours. The concepts of mortality salience and regulatory focus were then posited as potential factors that might influence this coexistence, and subsequent guidance of the self. This chapter will now present a series of hypotheses to be tested within this research in order to address the broader research question:

**Do consumers have the ability to hold two ideologically conflicting higher-level identity standards within the self and how does their coexistence influence the guidance of consumption and environmental behaviour?**

The chapter will begin by considering the relationship between EID and MID to better understand if the two constructs are likely to coexist within consumers. In particular, consideration will be given to the moderating effects of mortality salience and chronic regulatory focus and their potential for influencing the coexistence between EID and MID. Outcome variables relating to broader consumerist and pro-environmental intentions will then be presented and their relationships to EID and MID hypothesised. Finally, this section will consider the variability in these intentions based on variations of EID and MID.
3.2 Interaction between Material Identity and Environmental Identity

It is proposed that an EID will conflict with a MID due to their opposing ideologies, and these two identities will guide a consumer down two opposing paths. With salient identities interpreting identity relevant information to guide the self (Mercurio & Forehand, 2011), a salient MID will motivate the self towards consumerist behaviours, while a salient EID will frame consumption as bad for the environment and guide the self away from such behaviours, and toward pro-environmental avenues of behaviour. Identity theory suggests that the resulting behaviour will be the one that is guided by the identity that has the strong salience (Stryker & Burke, 2000). As such, the identity with weak salience should have little impact on the resulting behavioural intentions as the salient identity should guide the self when it comes to the opposing behavioural paths. However, there will also be cases where both identities are salient, and it is in such cases when both identities are salient there will be true conflict between the identities (Brook et al., 2008). With the encouragement of both materialistic and environmentalist ideologies within Western culture, EID and MID are thought to both be commonly salient within consumers and enable investigation of this conflict to understand how their coexistence will influence the guidance of the self.

This research will consider how EID and MID operate in conjunction whilst determining an individual’s consumerist and pro-environmental intentions. It will investigate the ability of each individual identity to influence the ability of the other identity to guide the intentions of the self. As identity theory posits that the salient identity will take precedence over an identity that provides conflict (Stryker & Serpe, 1982), the ability of one identity to influence behaviour should be dependent upon the salience of the conflicting identity that motivates the opposing path of behaviour.
The proposed conflict between an EID and a MID stems from the damage that human consumption has on the natural environment (Autio et al., 2009; Peattie & Peattie, 2009; Thogersen, 1995). As an EID frames a connection with and encourages protection of the natural environment (Clayton & Opotow, 2003), someone with a salient EID should be guided away from engaging in profligate consumerism and have weaker consumerist oriented intentions. In contrast, as a MID will present ideals of the material good life, it will guide the self towards consumerist pursuits and as such should lead to stronger consumerist oriented intentions (Dittmar, 2011). Although both identities should present conflicting guidance relating to such profligate consumerist pursuits, it has not yet been empirically investigated how this will impact intentions towards profligate consumerism.

While investigating the conflict between MID and EID, it will be important to understand the extent to which they are able to coexist within the self. If the salience of one of the identities results in the prevention of the salience of the other, there is likely to be little conflict between them as the presence of one will result in the absence of the other. Conversely, if the salience of one does not have the ability to impact the salience of the other, conflict will be more likely as the frame of meaning from both identities could concurrently seek to guide the self. With the mutual salience of conflicting identities core to the investigation of identity conflict (Brook et al., 2008), it will be important to understand whether there is a relationship between a consumer’s EID and MID.

The first thing that this research will look to understand in investigating the potential conflict between EID and MID will be the relationship between them to determine if they are likely to both be salient within the self. Understanding if an EID has the ability to prevent a MID from also being salient, and vice versa, will be integral in considering the potential conflict between these identities and whether this impacts the variance within profligate consumerist and pro-environmental intentions.
3.2.1 The relationship between Environmental Identity and Material Identity

Theoretically, an EID and MID present conflicting ideology to the self that should guide that person down opposing avenues of behaviour. Relevant to the relationship between EID and MID, existing studies have found that materialism has a negative relationship with environmentalism (Banerjee & McKeage, 1994) and also a negative relationship with environmental beliefs (Kilbourne & Pickett, 2008). However, it was also noted that such findings may be impacted by the measures used and more research that considered additional measures and factors is needed to properly understand this relationship (Banerjee & McKeage, 1994). As such, while there has been some quantitative evidence of a negative relationship between materialistic and environmental values, investigating the relationship between EID and MID with provide further understanding as to how this relates to identities constructed within the self.

There is also evidence that conflicting environmental and materialistic ideologies result in the absence of one when there is a strong presence of the other in various social groups. For example, voluntary simplifiers and global impact consumers have strong environmental values and reject materialistic consumerism (Cherrier, 2009; Iyer & Muncy, 2009). This provides evidence that when one places strong importance on the natural environment, it can cause them to reject materialistic values. Furthermore, the lifestyle followed by voluntary simplifiers where they avoid profligate consumption to protect the environment is central to their identity (Cherrier, 2009). With the rejection of materialistic ideals and the emphasis on environmental protection, the lifestyle led by voluntary simplifiers could be argued to relate to a strong EID, with a weak MID. As such, within voluntary simplifiers it could be argued that there is a negative relationship between EID and MID.
At the other extreme, people in Western culture have been argued to consider themselves as superior to nature rather than a part of it and such people obtain self-esteem by mastering the resources from the natural environment within the man-made material world (Becker, 1971; Vess & Arndt, 2008). There have also been consumers identified who hold identities that advocate for the futility of ‘green consumption’ in their pursuit of their material aspirations (Autio et al., 2009). These examples suggest that a strong MID results in a weak EID due to the lack of congruence in the meaning they can present. Once again, this will involve a negative relationship between the salience of EID and MID.

As consumers seek consistency within their view of themselves (Suh, 2002), the conflicting meanings represented by an EID and a MID should demonstrate a negative relationship. That is, because of the conflicting meanings the salience of an EID should weaken the salience of the MID. As such, there is hypothesised to be a negative relationship between EID and MID, due to consumers recognising the conflicting ideologies and seeking to pursue a consistent self-concept. Hence, it is hypothesised that:

**H1: EID has a direct negative impact upon MID.**

### 3.2.2 The Impact of Chronic Regulatory Focus upon Conflicting Identities

The consideration of personal attributes is suggested to provide a better understanding of self-complexity (Roccas & Brewer, 2002), and consequently this research considers the personal attribute of chronic regulatory focus as an internal factor that will influence the coexistence of EID and MID within the self. As identities are constructed over time, a consumer’s chronic regulatory focus will have the greatest impact on identity development, as chronic regulatory focus relates to an orientation that is highly accessible over time (Higgins et al., 1997), and has more enduring effect (Johnson & Yang, 2010). As such, a consumer’s chronic regulatory focus
orientation will frequently be guiding the self to influence the construction and maintenance of identities within the self.

The different orientations of regulatory focus will present different motivations based on the outcomes the self hopes to realise (promotion focus) or avoid (prevention focus) (Higgins, 1987). These motivations result in the self being oriented differently within an internal cognitive process. Specifically, consumers with a promotion focus will be in a state of eagerness and haste in their objective to obtain multiple hits/successes, while a consumer with a prevention focus will be in a more vigilant and cautious state to ensure they do what they can to avoid unwanted outcomes while maintaining obligations and safety (Förster, Higgins, & Bianco, 2003; Higgins, 1998). It is from this key difference in eagerness and cautiousness in the orientation of the self where chronic regulatory focus will impact the ability of two ideologically conflicting higher-level identity standards to coexist within the same person.

With their eagerness to realise the ideal self, people with a promotion focus have a greater willingness to pursue a larger range of options that can lead to goal achievement and they are more willing to pursue all means of advancement (Liberman, Molden, Idson, & Higgins, 2001). In their approach to activities they will be eager and hasty in order to obtain a larger number of hits/desired outcomes (Förster et al., 2003). From this, they will be open to a larger range of activities and behaviours that will help them achieve maximal goals, dreams and aspirations (Chernev, 2004; Idson, Liberman, & Higgins, 2000). For example, a person with a chronic promotion focus will have a large number of aspirational purchases they wish to make as a means to realise their ideal self, such as a new car, new TV, new house, branded handbag etc, all of which represent goals to reach an ideal self.

Due to their natural eagerness and relational elaboration, people with a promotion focus are not as thorough in the identification of errors within their tasks (Förster, Grant, Idson, & Higgins,
2001; Förster et al., 2003; Zhu & Meyers-Levy, 2007) and they are also more prone to making errors of commission (Crowe & Higgins, 1997). Furthermore, a promotion focus does not result in scanning for mismatches in goals (Zhu & Meyers-Levy, 2007). As such, when a consumer has a chronic promotion focus they will be less likely to identify the contradictions that exist between ideologically conflicting higher-level identity standards and consequently reduce the likelihood that one identity will be rejected to correct this inconsistency. As such, a chronic promotion focus will increase the likelihood of coexistence between conflicting identities.

Relating this to the identities being investigated within this research, a consumer with a chronic promotion focus will be more likely to have coexisting EID and MID because they will be less likely to identify the inconsistency in the behaviours and ideology they present to the self. If the self does not recognise this conflict between the guidance and ideology framed by these identities, this will reduce the ability for either of them to impact the ability for the other to also be salient. Therefore, for people with a chronic promotion focus, there will be a weaker relationship between EID and MID. That is, for people with higher scores for chronic promotion focus, there will be less impact of their Environmental Identity upon their Material Identity. Thus, we hypothesise:

**H2a: A chronic promotion focus will negatively moderate the relationship between EID and MID.**

In contrast to consumers with a promotion focus, consumers with a prevention focus will be in a state of cautiousness to ensure they maintain congruence with their ought self (Higgins, 1987). When someone has a prevention focus they will be in a state of vigilance and focussed on avoiding errors of commission in their activities (Crowe & Higgins, 1997). It creates a state
where the self will be less willing to entertain riskier options where a person will concentrate on fewer more restricted pathways which they consider as clearly appropriate as they seek to avoid negative outcomes (Zhu & Meyers-Levy, 2007). Consequently, such people will have a narrow focus with limited alternatives relating to what they see as appropriate minimal goals in their intent to avoid unwanted outcomes (Chernev, 2004; Idson et al., 2000).

Consumer research has shown that consumers with a prevention focus will be less likely to explore new options to ensure they maintain the status quo in order to prevent unwanted outcomes (Chernev, 2004). They will also have a narrow item specific elaboration where they focus only on specific concrete attributes within the avenues of behaviour where they wish to maintain these obligations (Zhu & Meyers-Levy, 2007). As such, a person with a chronic prevention focus will pursue a narrower range of activities to maintain the status quo and avoid unwanted outcomes. As consumers internalise identities relating to such behaviours and roles (Burke & Reitzes, 1981), a chronic prevention focus will result in the construction and salience of a narrower range of identities within the self.

In maintaining status quo and alignment with their ought self a person with a prevention focus will apply greater attention to detail to ensure they avoid mistakes (Liberman et al., 2001), and be vigilant in avoiding mismatches between their goals (Zhu & Meyers-Levy, 2007). As such, when a consumer has a chronic prevention focus, they will have greater consistency in their cognitions and behaviours through greater attention to detail, and vigilant consideration of safe, correct, and non-contradictory choices. From this, when a consumer has a chronic prevention focus that they will have greater consistency between their identities. Therefore, with the conflicting ideology presented by EID and MID, a consumer with a chronic prevention focus will be more likely to recognise this conflict, increasing the likelihood they will reject one of these identities to maintain self-consistency. As such, a chronic prevention focus will reduce the likelihood of coexistence between conflicting identities.
Supporting this argument is the notion that people with conflicting identities will experience greater discrepancy between their ought self and actual self, where they are unable to satisfy the obligations from all the identities that are in conflict (Brook et al., 2008). Someone with a chronic prevention focus will consistently seek to minimise such discrepancy between the ought and actual self (Higgins, Roney, Crowe, & Hymes, 1994). As such, with ongoing heightened efforts in seeking to reduce such a discrepancy, a consumer with a chronic prevention focus will be more likely to reject an identity that presents conflicting ideology. That is, as conflicting identities will increase the discrepancy between a consumer’s ought and actual self (Brook et al., 2008), a chronic prevention focus will reduce the likelihood of such conflicting identities from coexisting within that individual.

Applying these arguments to the identities being investigated within this research, a consumer with a chronic prevention focus will be less likely to have coexistence between EID and MID because they will be more likely to identify the inconsistency. With the recognition of this conflict between the guidance and ideology presented by these identities, this would decrease the likelihood that they will commit to the meanings of both and increase the likelihood that one of the conflicting identities will be rejected as a means to maintain the ought self. Therefore, for people with a chronic prevention focus, there will likely be a stronger negative relationship between EID and MID, where chronic prevention focus has a moderating effect that strengthens this negative relationship. As such, for people with higher scores for chronic prevention focus, there will be a greater negative impact of their EID upon their MID.

H2b: A chronic prevention focus will positively moderate the relationship between EID and MID.
3.2.3 The Impact of Mortality Salience on Identity Conflict

The consideration of situational factors is argued as something that needs investigation to better understand self-complexity (Roccas & Brewer, 2002), and this research considers the experimental manipulation of mortality salience as one such external situational factor that will impact the ability for EID and MID to coexist within consumers. An identity presents the self a frame of meaning that can give understanding to a consumer of who they are, and when a consumer experiences mortality salience, they will seek to extend that understanding of who they are for a consistent self-affirmation to alleviate the terror (Burke et al., 2010). It is therefore proposed that following mortality salience, the self will seek to increase the salience of identities that provide such a frame of meaning the enables a consistent self-affirmation.

One commonly noted effect of mortality salience is that it leads to a stronger conviction towards ones worldviews and ideals (Burke et al., 2010; Greenberg et al., 1990). When someone is faced with thoughts of death, they will seek self-affirmation to alleviate the negative psychological affects (Schmeichel & Martens, 2005). This desire for self-affirmation is consistent with a noted goal within identity theory (Swann & Hill, 1982). As such, following mortality salience a person will seek a consistent self-affirmation to alleviate the terror associated with death (Burke et al., 2010), and an identity will present a frame of meaning for this self-affirmation. During the process of self-affirmation, a person will seek a consistent self view (Suh, 2002). As such, mortality salience leads the self to pursue a consistent self-affirmation (Burke et al., 2010), and conflicting identities will not provide this. Therefore, it is proposed that mortality salience will favour the salience of one identity and rejection of the other, and hence reduce the likelihood of coexistence.

Supporting this argument, it has been observed that when a consumer experiences mortality salience they will apply a process of compensatory conviction where they will have increased
conviction towards particular worldviews and ideals, which has also been shown to lead to more self-consistent personal goals and identifications (McGregor et al., 2001). With regards to identities that present conflicting meaning, in order to have strong conviction to the meanings and ideals presented by one identity and maintain self-consistency, the salience of the other conflicting identity will need to be weakened (Baumeister, 1999; Levy & Reeves, 2011). As such, if a consumer has underlying identities and they seek conviction to one in response to mortality salience, they will need to weaken the salience of other identities that present conflicting meaning for consistent self-affirmation.

Combining the above arguments, mortality salience will lead to reparative self-affirmation through a particular worldview (Burke et al., 2010), which will increase the salience of an identity to enable this. With mortality salience also resulting in an individual shifting toward greater self-consistency during reparative self-affirmation (McGregor et al., 2001), in heightening the conviction to the meaning presented by a particular identity they should also seek to reject ideals and meanings that will be framed by conflicting identities. As such, following mortality salience, a consumer will be less likely to have two salient higher-level identity standards that present conflicting ideologies.

There have been previous findings that suggest materialism is heightened by mortality salience (Arndt et al., 2004; Kasser & Sheldon, 2000; Mandel & Heine, 1999; Solomon & Arndt, 1993). As mortality salience leads to a stronger attachment to one's worldview (Burke et al., 2010), and the studies that have provided evidence for mortality salience leading to materialistic pursuits have been conducted within advanced Western economies, which have strong social forces encouraging materialism (Kasser & Ryan, 1993), people within these countries will have commonly internalised a materialistic worldview that is likely to be triggered following mortality salience (Arndt et al., 2004). As such, the heightened materialistic tendencies
following mortality salience relate to internalised materialistic values (Arndt et al., 2004), which are framed by a MID.

With regards to EID, as physical death is inherently linked with biology, associations with nature are connected with mortality salience (Koole & Van den Berg, 2005). The impact of mortality salience on pro-environmental behaviours and consumers' motivation to protect the natural environment has also been considered previously, and there are arguments for mortality salience both weakening motivation to protect the environment (Fritsche & Häfner, 2012), and also arguments for mortality salience strengthening pro-environmental intentions (Fritsche et al., 2010; Vess & Arndt, 2008).

When salient, a higher-level identity standard should provide ideals, beliefs and principles that are used to guide the self (Tsushima & Burke, 1999), and mortality salience leads to a strengthening in conviction towards such worldviews (McGregor et al., 2001). As such, the strengthening of conviction toward a particular worldview following the effects of mortality salience will relate to an increased salience of an identity that frames this worldview to the self. Hence, the existing empirical findings investigating the effects of mortality salience on materialistic and ecological variables are the result of mortality salience either activating a MID or an EID, as both can provide the desired self-affirmation.

Summarising the above, consumers will seek conviction to the meaning of an identity following mortality salience as a source of self-affirmation, and to have more self-consistency, they will reject contradictory ideologies presented by different identities. As such, and due the conflict between environmentalist and materialistic ideals (Banerjee & McKeage, 1994), mortality salience should reduce the likelihood that an EID and MID will be able to coexist. Therefore, following mortality salience, a consumer will be more likely to favour either a MID or an EID, but not both, which will lead to a strengthening in a negative relationship between
them. That is, for people who have had mortality salience triggered, there will be a stronger negative relationship between EID and MID.

**H3: Mortality salience will moderate the relationship between EID and MID.**

### 3.3 The Guidance of Material Identity and Environmental Identity

A primary focus of this research is to better understand how the coexistence of EID and MID impacts the guidance of profligate consumerist and pro-environmental intentions that share meaning with these identities. As such, core to this investigation will be understanding a consumer’s determination to follow the guidance towards avenues of behaviour that share meaning with each of these higher-level identity standards. This section will present four variables that are hypothesised to be guided in opposing directions by EID and MID. Some of the proposed conflict between these identities lies in the opposing directions that they will guide relating to consumerist and pro-environmental behaviour. As such, a clear understanding of the ability of each identity to guide such behaviours will be important to determine the ability of each identity to moderate the other’s guidance towards them. The relevant variables to be investigated are willingness to sacrifice to protect the environment (WTS), intentions toward voluntary simplicity, tendency to engage in compulsive buying, and tendency to engage in status consumption. These outcome variables were chosen as they were deemed to relate to broader avenues of consumerist and pro-environmental behaviour as well as to the conflicting meanings of EID and MID.

#### 3.3.1 Tendency to engage in Compulsive Buying

Compulsive buying is a term that is used to describe when people have a strong urge to purchase and subsequently engage in excessive consumer purchasing (Faber, O’Guinn, &
Krych, 1987; Valence, d'Astous, & Fortier, 1988). Consequently, people with a stronger tendency toward compulsive buying will engage in greater levels of consumption and material acquisition. While the term has been considered as a more specific concept under the umbrella of compulsive consumption (O'Guinn & Faber, 1989; Valence et al., 1988), compulsive consumption also considers things outside the scope of this research such as alcohol abuse and gambling whereas compulsive buying specifies material purchasing (O'Guinn & Faber, 1989). This research will specifically consider compulsive buying as it relates to the desire to engage in profligate material consumption.

The tendency of a consumer to engage in compulsive buying will provide a good indication of their propensity to engage within profligate consumption. Compulsive buying has also been associated with conflicting goals with which a consumer might have (Baumeister, 2002; Faber & Vohs, 2004), which is also relevant with the investigation of the conflicting identities in this research.

It is expected that in valuing possessions as a means towards happiness and success that a MID would guide the self to engage in compulsive buying. While traditional views on compulsive buying suggested it is not related to the desire for material acquisition but rather an irrational compulsion through which one seeks to alleviate psychological distress (O'Guinn & Faber, 1989), more recently authors have argued a positive association between materialism and compulsive buying and empirically found significant positive relationships between the two (Dittmar, 2005a; Rindfleisch et al., 1997; Roberts, Manolis, & Tanner, 2003). Furthermore, even studies that have argued materialism as not being a predictor of compulsive buying found that compulsive buyers display higher levels of materialism than regular consumers (O'Guinn & Faber, 1989). As such, existing findings suggest that compulsive buying is guided by underlying materialistic values within the self. With materialistic values argued to be framed
to the self by a MID, it would be expected a MID will increase a consumer’s tendency towards compulsive buying.

**H4: There is a positive relationship between MID and compulsive buying.**

### 3.3.2 Tendency to engage in Status Consumption

Status consumption refers to material acquisition whereby the consumer purchases goods that are seen to have status and intended to be seen by others as a means to elevate their social position and perception among others (Bagwell & Bernheim, 1996). Status consumption relates to the outward expression of the self through consumption and acquisition, which is central to the consumer self-concept (Jensen Schau & Gilly, 2003; Townsend & Sood, 2012; Wright, Claiborne, & Sirgy, 1992). Furthermore, status consumption has been noted as a self-affirming process (Sivanathan & Pettit, 2010), which is an important component in the guidance of an identity. With this connection between status consumption and the motivations relating to identity, consideration of status consumption will help to provide a better understanding of how the coexistence between EID and MID influences the likelihood than a consumer will seek to express themselves through pursuit of resources within the consumer marketplace. That is, differently to the investigation of compulsive buying (albeit with similar outcomes), the consideration of status consumption will help to understand the drive towards consumption as a means to express the self.

As status consumption involves acquisition with the intention to signal status (Sivanathan & Pettit, 2010), and a MID will frame expressions of wealth and nice things with success and happiness, it is expected that those with a salient MID will be guided towards status consumption. That is, products that outwardly express status will provide a means by which
people with a MID can signal their material virtue. As such, it will be expected that consumers with a salient MID will have stronger tendency towards status consumption.

**H5: There is a positive relationship between MID and status consumption.**

As with compulsive buying, status consumption enables an investigation of the ability of an EID to interrupt the ability of a MID to guide the self. With the feeling of connection with the natural environment, an EID involves a caring for nature and identification with other environmentalists (Clayton & Opotow, 2003). As environmental values will conflict with materialistic values, outwardly expressed consumerism through status consumption will not align with the norms of environmentalists. Furthermore, with an EID’s guidance to protect the natural environment and with the damage that consumption has on nature, this should further lead an EID to guide the self away from compulsive buying. As such, consideration of status consumption and compulsive buying will enable the testing of whether the coexistence between EID and MID will impact the ability of the MID to guide a consumer to engage in profligate consumption and outwardly express themselves through material consumerism.

### 3.3.3 Willingness to Sacrifice to Protect the Environment

Willingness to sacrifice to protect the environment (WTS) considers the level of sacrifice a consumer is willing to make to their material and financial capability in order to protect the natural environment. It was first considered within the International Social Survey Program in the 1990s (Franzen, 2003), and has subsequently been applied in academic studies (see Dono, Webb, & Richardson, 2010; Oreg & Katz-Gerro, 2006b; Stern et al., 1999). It considers whether a consumer is willing to pay higher prices, higher taxes and also accept a drop in their standard of living in order to protect the natural environment.
Based on the idea that individual overconsumption is a significant contributor to the current problems for ecological sustainability (Peattie & Peattie, 2009), commitment to protect the natural environment will require individual sacrifices relating to tempering materialistic consumption (Sheth et al., 2011). As an EID will guide a consumer away from behaviours that damage the natural environment (Clayton & Opotow, 2003), a consumer with a strong EID will be more likely avoid behaviours that will damage it. Furthermore, as an EID frames the natural environment to the self as an important moral entity that should be protected (Clayton & Opotow, 2003), someone with a strong EID will be more willing to make sacrifices in order to protect it. Subsequently, it would be expected that an EID will guide the self towards WTS.

**H6: There is a positive relationship between EID and WTS.**

### 3.3.4 Intentions toward Voluntary Simplification

Voluntary simplifiers are people who make a conscious choice to simplify their lifestyle with regards to possessions and to actively move away from profligate consumerism. Environmental concerns are a commonly noted motivation for voluntary simplifiers (Ballantine & Creery, 2010), and a better understanding of voluntary simplification is suggested to provide a pathway to ecologically sustainable consumption (McDonald et al., 2006). As such, in contrast to compulsive buying, the measurement of intentions towards voluntary simplification consider a consumer’s guidance away from profligate levels of material consumption. Therefore, it is an outcome variable through which to consider the influence of coexistence between EID and MID to guide the self, capturing the perspective of the ability of an EID to guide this more frugal avenue of consumption.

Voluntary simplification differs from WTS as it relates to a voluntary lifestyle choice to live a more frugal lifestyle. For example, a voluntary simplifier will have relatively fewer material
possessions, and not replace or upgrade household appliances unless the ones they own stop working. Differently, while it relates to sacrifice to protect the environment, WTS does not specify a reduction in consumerism as being part of such sacrifices. For example, a consumer may be happy to sacrifice money by paying significantly more for environmentally friendly household appliances, but not necessarily reduce their overall level of consumption.

Mass consumerism has been frequently connected to damage to the natural environment (Autio et al., 2009; Peattie & Peattie, 2009; Thogersen, 1995), and arising from this perspective environmentalists have been commonly engaged in voluntary simplification as a means to reduce the impact they have upon nature (Cherrier, 2009). Voluntary simplifiers typically recognise the damage that consumption has on the natural environment, which combined with their desire to protect it, motivates reduced consumption (Johnston & Burton, 2003). An EID will guide a consumer toward behaviours to protect nature and away from behaviours that damage nature (Clayton & Opotow, 2003). As such, in pursuing paths of behaviour that are seen to best align with a caring for and protecting the natural environment, someone with a strong EID should consequently have stronger intentions towards voluntarily simplification.

**H7: There is a positive relationship between EID and voluntary simplification.**

In understanding commitment to protect the natural environment, it will also be important to consider what an individual is willing to sacrifice as such sacrifices should be considered a true measure of commitment (Inglehart, 1995). Within the context of this research, it is important to understand what a consumer would be willing to sacrifice from a material sense in their commitment to protect nature and the ability of a MID to interrupt an EID to guide a consumer to make such sacrifices. As a MID will frame materialistic consumerist pursuits and the acquisition of material resources as central to life and a means towards happiness and success, it should also be expected that when there is coexistence between an EID and a MID, that this
may have an effect upon the EID’s ability to guide a consumer towards making sacrifices that will hinder their ability to acquire material resources. As such, the inclusion of voluntary simplification and WTS is appropriate to investigate if a MID can interrupt the ability of an EID to guide more sustainable pro-environmental avenues of behaviour.

3.4 Conflict Between the Guidance of Environmental Identity and Material Identity

This section will seek to better understand the potential conflict between EID and MID by considering the ability of each identity to guide the self when in the presence of the other. Specifically, it hypothesises upon how the interaction between the EID and MID constructs influences the variance within the outcome variables outlined in the previous section. By considering the comparative effects of EID and MID upon the outcome variables, this will provide an understanding of how ideologically conflicting higher-level identity standards impact the variance in profligate consumption and pro-environmental avenues of behaviour.

The concepts of identity consistency and conflicting identities have been considered within marketing literature (Ahuvia, 2005; Holt & Thompson, 2004; Thompson, 1996), with consideration also given to the role of conflict and opposing meanings in the construction of the consumer identity narrative (Luedicke et al., 2009; Murray, 2002). However, as little consideration of identity conflict within the self has been undertaken in a consumer context, much of the hypothesising in the following section will apply arguments and findings from psychology literature (e.g. Brook et al., 2008; Burke, 1991; Donahue et al., 1993; Stryker & Burke, 2000; Stryker et al., 2000).
3.4.1 The Impact of Conflicting Identities in the Guidance of the Self

With the multiple identities that a consumer possesses, these can be collaborative and integrated together a part of a consistent core-self, but they can also be present as divided and conflicting components of a more fragmented self (Arnould & Thompson, 2005; Donahue et al., 1993). With the conflict between environmental and materialist ideology (Banerjee & McKeage, 1994; Droge, 1995), it will be difficult for both identities to integrate together as part of a consistent and authentic underlying core-self. As such, when an EID and MID coexist within the same self, they will be more likely to be present as fragmented components compartmentalised separately within that consumer.

When a consumer holds fragmented identities that come into conflict, they will often lack the resources or ability to satisfy the obligations of both (Brook et al., 2008). That is, while there is an internalised identity which frames meanings that will guide the self in one direction and a disparate identity that frames antithetical meaning and guides intentions in an opposing direction, it will be difficult for the self to follow the direct guidance presented by both. As materialism conflicts with the guidance of other values (Burroughs & Rindfleisch, 2002), a MID will also likely conflict with an EID, but it is not currently clear what the guidance of the self will be within this situation.

Identities present conflict within the self when both of them are salient within a consumer but not when one is salient and the other is not (Brook et al., 2008). If the opposing identity is not salient, the salient identity will provide guidance without interruption (Stryker & Burke, 2000). As such, an identity will determine a consumer’s intentions when it is salient and the conflicting identity is not. Considering this, an EID should prove a strong determinant of pro-environmental intentions when a MID is not salient. However, as will be argued below, while a MID will weaken the guidance of an EID, an EID will not weaken the guidance of a MID.
3.4.2 The Influence of Material Identity on the Guidance of Environmental Identity

Concerning the ability of EID to guide voluntary simplification and WTS, intrinsic motivation has been empirically shown to be a more effective driver of pro-environmental behaviours when compared to extrinsic motivation (Pelletier, Tuson, Green-Demers, Noels, & Beaton, 1998). There is also evidence that such environmental behaviours provide feelings of well-being for consumers with intrinsic value orientations via intrinsic satisfactions (Brown & Kasser, 2005). An EID also provides greater well-being through the calming effects that nature can provide (Hinds & Sparks, 2009), and through mindfulness which along with an intrinsic value orientation can bridge psychological and ecological well-being (Brown & Kasser, 2005). Applying these findings, intrinsic orientations and motivations will best align with an EID, and better enable an EID to guide the self towards pro-environmental avenues of behaviour.

Relevant to the guidance of EID when a MID is guiding an conflicting path, it has been recognised that when the self has internalised different identity standards that frame conflicting guidance, that this conflict will present as a threat to the self (Holt & Thompson, 2004). As such, when the self is guided in opposing directions by EID and MID, this will result in self-threat. In the event of self-threat, a consumer will be oriented towards extrinsic motivations as they seek immediate self-repair (Sheldon & Kasser, 2008). Therefore, if a consumer experiences conflicting guidance between EID and MID, this will lead that consumer to be oriented towards extrinsic motivations as a means of self-repair.

Combining the above paragraphs, extrinsic motivation will likely occur when a consumer experiences conflicting guidance between EID and MID. However, as environmental behaviours are better guided under intrinsic motivation (Pelletier et al., 1998), an EID will best be able to guide an intrinsically motivated consumer. As such, the likely orientation of the self
towards extrinsic motivation from the conflicting guidance that a MID presents to an EID will weaken the EID’s ability to drive pro-environmental avenues of behaviour.

Extending the above argument, intrinsically oriented well-being is provided when one’s activities are congruent with holistic underlying values providing feelings of authenticity (Ryan & Deci, 2001). Thus, for an EID to provide well-being, it should be congruent with consistent underlying core values within the self. As inconsistency within the self positively relates to feelings of inauthenticity (Boucher, 2011), when a consumer has coexisting higher-level identity standards that present conflicting meaning and guidance to the self, the resulting inconsistency will make it difficult for that person to experience such feelings of authenticity. As such, the optimal functioning an EID will require feelings of authenticity, and if there is also a salient MID, this will prevent such feelings of authenticity. Therefore, the presence of a MID should again weaken the ability of EID to guide the self.

Frugal consumption is also motivated by intrinsic satisfactions (De Young, 1996). Voluntary simplifiers obtain intrinsic feelings of well-being by avoiding profligate consumption while also engaging in other environmental behaviours (Rich, Hanna, & Wright; Sherry, 2012). With the intrinsic well-being they receive from avoiding materialistic consumption and engaging in environmentally responsible behaviours, voluntary simplifiers provide support for the preceding arguments as their lack of conflicting materialistic ideals enables them to experience the feelings of authenticity from their environmental behaviours (Ballantine & Creery, 2010; Cherrier, 2007; Zavestoski, 2002). That is, a salient MID will make it hard for a person to obtain well-being from their EID and thus weaken that EID’s ability guide the self. Conversely, if someone doesn’t have a salient MID, this will increase the ability of an EID to provide optimal guidance towards pro-environmental behaviours.
To summarise, the ability for an EID to guide pro-environmental avenues of behaviour will be weakened when there is a coexisting MID. As a MID frames materialistic ideals, someone with a MID will want to maximise their material prosperity. As such, a MID will make it harder for the EID to guide behaviour as the MID will drive an opposing guidance to the EID and this opposing guidance will also the result in feelings of inauthenticity and extrinsic motivation, which will further weaken the ability of EID to guide the self. As such, a salient MID will weaken the ability of an EID to guide pro-environmental avenues of behaviour.

As per H7, EID will guide the self towards voluntary simplification. However, if there is a coexisting MID, this will guide the self toward consumerist purchasing, making it harder for the EID to guide more frugal consumption. As such, a MID will weaken the ability of an EID to motivate voluntary simplification. Hence, a MID will negatively moderate the relationship between EID and voluntary simplification.

**H8a: A MID will negatively moderate the relationship between EID and voluntary simplification.**

As per H6, an EID will guide the self towards WTS. However, as these sacrifices involve paying higher prices, higher taxes and a drop in the standard of living, and a MID values wealth and acquisition, a MID will reduce a consumer’s willingness to make these sacrifices. Therefore, if there is coexistence between EID and MID within the self, the MID will weaken the EID’s ability to guide a consumer’s WTS. Hence, a MID will negatively moderate the relationship between EID and WTS.

**H8b: A MID will negatively moderate the relationship between an EID and WTS.**
3.4.3 The Impact of Environmental Identity on the Guidance of a Material Identity

As outlined in the previous section, when a consumer has two different identities guiding opposing paths of behaviour, this will result in a self-threat and subsequent orientation towards extrinsic motivation as a means of self-repair. One such extrinsically motivated behaviour noted to result from negative psychological effect is consumerist purchasing (O'Guinn & Faber, 1989; Roberts, 1998). Such compensatory consumption behaviours have been recognised as a response to self-threat whereby the acquisition of consumer goods can be sought in a self-affirming process (Roberts, 1998; Townsend & Sood, 2012), and material consumption has also been argued as an avenue by which consumers seek to address sources of identity conflict (Ahuvia, 2005; Thompson, 1996).

Materialistic behaviours enable consumers to pursue their short-term well-being and self-esteem objectives (Shrum et al., 2014). With consumers seeking self-esteem in order to deal with self-threat (Solomon, Greenberg, & Pyszczynski, 1991), materialistic behaviours will similarly be applied following identity conflict as a means of self-repair. Consumer research has shown that following identity threat a consumer will have a stronger desire toward identity consistent consumer behaviours to affirm a threatened identity (Ward & Broniarczyk, 2011). As such, the psychological outcomes that consumers are noted to pursue via material acquisition align with those that will be expected when a consumer is pulled in two opposing directions from different higher-level identity standards presenting conflicting ideology.

Supporting the argument that the pursuit of material resources can be applied as a self-repair mechanism is that material acquisition enables a person to signal who they are (Shrum et al., 2014). The process of signalling to oneself and others is important for self-affirmation and material acquisition is commonly pursued to provide this (Pettit & Sivanathan, 2011; Rucker & Galinsky, 2008; Swann Jr, Rentfrow, & Guinn, 2003). With self-affirmation a noted
response to self-threat (McGregor et al., 2001), material resources will similarly be sought as a means of self-affirmation when a consumer has coexisting identities guiding opposing behavioural directions.

Acquisition of material resources is seen as something that will repair psychological wounds, and protect against self-threat in the future (Shrum et al., 2014; Sivanathan & Pettit, 2010). The term ‘retail therapy’ refers to the process whereby people often engage in consumerist behaviours as a means to improve their well-being (Atalay & Meloy, 2011). People who experience anxiety from inability to meet their identity expectations have also been shown to engage in conspicuous consumption (Braun & Wicklund, 1989). Similarly, powerlessness leads to an increase in compensatory consumption through the pursuit of products that signal prestige (Rucker & Galinsky, 2008). As such, consumption behaviour is a well-recognised method that is applied as a reparative means in response to self-threats and by extension it is expected to result from coexisting identities that guide opposing directions.

As materialistic consumers engage in compensatory materialistic consumer behaviour as a means of self-affirmation following a challenged self-concept (Shrum et al., 2014), someone with a MID will also be guided towards compensatory consumer behaviour when they experience conflict within the self. Status consumption and compulsive buying are two such behaviours that have been noted to be applied during compensatory consumption (Lee & Shrum, 2012; Pettit & Sivanathan, 2011; Rucker & Galinsky, 2008). As such, if a consumer’s self-concept is challenged with coexisting identities that present conflicting ideology and they have a salient MID, this MID will guide them towards compensatory consumerist behaviours. By extension, if a consumer experiences conflict between a salient MID and EID, then the MID will present as an option for self-repair by presenting guidance towards extrinsically motivated consumption behaviours.
Thus, consumers with a MID will likely be guided towards compensatory materialistic consumer pursuits as a self-affirming repair mechanism following identity conflict. As such, when both an EID and MID present conflicting guidance, this will challenge that consumer’s self-concept and orient the self towards extrinsic motivations and enable optional guidance of the MID. That is, with the conflicting guidance creating uncertainty as to the direction the self should follow, the MID will frame an extrinsically oriented avenue for self-repair, and the EID will not. Therefore, the MID will continue to guide the self towards consumerist pursuits despite the presence of a salient EID that would otherwise guide an opposing direction.

**P1: The ability of a MID to guide the self towards consumerist avenues of behaviour will be uninterrupted by an EID.**

To address this proposition, the inability of EID to interrupt the guidance of MID towards the consumerist behaviours of compulsive buying and status consumption is hypothesised below.

As per H4, a MID should guide a consumer towards compulsive buying. Compulsive buying has also been argued as a means of compensatory self-repair (Dittmar, 2005b; Woodruffe, 1997), and consumers high in materialism are more likely to experience the desired positive effect from compensatory consumption (Shrum et al., 2014). As such, when a person experiences conflict between coexisting EID and MID, they will continue to be guided toward compulsive buying through the frame of meaning presented by the MID as a means of reparative self-affirmation. Therefore, the guidance of MID towards compulsive buying will remain uninterrupted when there is a coexisting EID that would otherwise guide the self away from profligate consumerism. Thus, we hypothesise:

**H9a: An EID will not moderate the relationship between MID and tendency toward compulsive buying.**
As per H5, a MID will guide a consumer towards status consumption. Status consumption is also applied as a form of compensatory consumption (Rucker & Galinsky, 2008, 2009), and people will seek ownership of high-status goods to repair psychological wounds from self-threat (Pettit & Sivanathan, 2011; Sivanathan & Pettit, 2010). As such, in the event of self-threat via the conflicting guidance of EID and MID, status consumption will present as an extrinsically motivated avenue of self-repair. As such, a MID will continue to provide uninterrupted guidance of the self towards status consumption when there is a conflicting EID that would otherwise guide an opposing path. Thus, we hypothesise:

**H9b: An EID will not moderate the relationship between MID and tendency toward status consumption.**

### 3.5 Conclusion

Figure 3.5.1 – Conceptual Framework
This chapter presented the broader research question and hypotheses to be investigated within this thesis to better understand the conditions for coexistence of EID and MID within consumers, and how this influences consumerist and pro-environmental behaviours. Terror management theory and regulatory focus theory were applied to hypothesise the impact of mortality salience and chronic regulatory focus on the relationship between EID and MID and hence their likelihood to coexist within the self. A series of outcome variables relating to consumerist and pro-environmental avenues of behaviour were then presented and their relationships with MID and EID hypothesised. Finally, the recognised psychological motivations of materialistic and pro-environmental behaviours were used to hypothesise upon the likely guidance of EID and MID towards these behaviours in instances of identity conflict. The holistic representation of the hypotheses presented within this chapter are outlined within the conceptual framework, shown in Figure 3.5.1 above. The next chapter will present the research method that this thesis applies in order to address the research question and hypotheses presented within this chapter.
Chapter 4: Method

4.1 Introduction

To address the research question and hypotheses outlined in the previous chapter, this research pursues a quantitative research method. The chapter will begin with the philosophical orientation of the research and justification of an online self-administered survey as appropriate for collecting data to address the research question and hypotheses. This is followed with a discussion on the important considerations in the measurement of identity and a description of the instruments chosen for measurement of each identity construct within this research as well as the operationalisation of all other constructs to be measured. The outline of the survey structure will then be discussed followed by a description and justification of the sampling method and data quality assurance techniques. The chapter will then present the validity and reliability of the measurement models and finally outline the moderation analysis to address the research hypotheses using partial least squares structural equation modelling (PLS-SEM).

4.2 Research Design and Data Collection

4.2.1 Philosophical Perspective of the Research

This research was conducted from a positivist perspective, where knowledge is collected and verified using scientific measurements (Krauss, 2005). Importantly, the application of a positivist perspective enables deductive reasoning to hypothesise upon relationships, which can then be tested to establish the facts about what is occurring (Krauss, 2005). Positivist research orientations typically apply a quantitative methodology, which enables mathematical and statistical analysis to accurately conclude upon what is occurring within the data (Bernard & Bernard, 2012). As such, to address the research question and hypotheses outlined in the
previous chapter, a positivist approach with a quantitative research design was considered as the most appropriate in order to establish the hypothesised relationships and moderating effects to ultimately address the research question.

4.2.2 Data Collection

An online self-administered survey with the assistance of an online panel company was deemed appropriate to collect the data to address the research question and hypotheses. Quantitative surveys enable the researcher to easily and cost effectively collect large samples of data for statistical analysis (Hair, Lukas, Miller, Bush, & Ortinau, 2008). With their standardised data collected, surveys enable the researcher to distinguish small differences and relationships within a population and consequently provide good data for the hypothesis testing within this research. While self-administered surveys have disadvantages relating to inability of the researcher to ensure the respondents properly complete and understand all the questions, maintain proper attention levels and are truthful in their responses, these disadvantages can be minimised with intelligent survey design with a scientific approach (Hair et al., 2008).

For this research, creation and distribution of the surveys online was deemed to be able provide good quality data most efficiently. Web surveys enable instant distribution to a broad demographic, instant return of data and computer assisted design features (Couper, 2000). Important for this research, the computer assisted design features enabled randomisation of items, forced response, instant filtering of intelligible respondents and multiple quantitative question formats to maintain respondent attention and assist in avoiding common method bias (MacKenzie & Podsakoff, 2012). The web survey program used, ‘Qualtrics’, enabled instant downloading of the data in a file format to be quickly viewed and processed within SPSS 24, preventing the need for double entry that can also result in error. Respondents also have the
freedom to complete the surveys privately within their own time and have full anonymity to ensure minimisation of social desirability bias and other bias that may result through exposure to the researcher (Couper, 2000). It also increased the likelihood that the respondents would complete the surveys within a familiar environment, which was deemed to provide an accurate representation of the more inherent self-importance of the identities being measured. Finally, with the majority of Australian households having access to the Internet, online distribution enabled collection of a representative sample of the Australian general population.

Survey distribution with the assistance of the panel company provided further time saving for fast and efficient collection of responses. While web surveys can often have a lower response rate (Kaplowitz, Hadlock, & Levine, 2004), the use of a panel company addressed this issue with panel members readily available and willing to participate. With the control over the respondents who are invited to complete the survey, the use of a panel also assisted in the removal of bias such as non-response and self-selection bias.

The panel company used, Qualtrics, has long term experience in online survey development and distribution for the collection of data online for over 15 years. While Qualtrics provided access to a large range of respondents readily willing to complete on-line surveys, a potential weakness is their use of incentives for their panel members, which could create bias within the sample towards consumers that are more susceptible to such incentives. However, after consultation with Qualtrics, it was deemed that this incentive was too minimal to have a significant effect and that Qualtrics provided an appropriate panel to ensure good collection of representative data from the Australian general population.
4.3 Quantitative Operationalisation of Identity Constructs

The two core constructs being considered within this research were environmental identity (EID) and material identity (MID). As such, to address the research question it is important to define these constructs and to discuss important considerations in the measurement of identity.

In interpreting the external environment an identity will provide a person with an understanding of who they are and guide the self towards consumer behaviours that are consistent with the meanings presented by that identity (Chugani et al., 2015). Here, the self should be considered at the highest level of abstraction and the totality of a consumer’s thoughts and feelings (Sirgy, 1982), and at a lower level of abstraction are multiple identities that are held within the self (Aquino & Reed, 2002). Important in the measurement of different identities is consideration of the level of abstraction at which the identities are measured, as measurement of identities at too higher level of abstraction will likely invoke the measurement of multiple identities simultaneously (Aquino & Reed, 2002).

Both EID and MID are considered as higher-level identity standards where both frame broader values and ideology. While the outer parameters of an identity may be difficult to define, when measuring an identity it is important to consider the core traits and values that are held within the identity to be measured (Aquino & Reed, 2002). Furthermore, as higher-level identity standards frame such values to the self that provide the agency for the more concrete behaviours to express an identity (Tsushima & Burke, 1999), the measurement of such values will provide a good proxy indicator for the salience of the identity that holds them.

Multidimensional operationalisations present good measures for higher-order constructs (Polites, Roberts, & Thatcher, 2012), and as such, multidimensional measures are appropriate for higher-level identity standards. With EID and MID relating to the specific objects of the natural environment and resources within the consumer marketplace, this research will
operationalise EID and MID by measuring such meaning via more concrete observable variables relating to how subjects perceive the natural environment and material resources respectively.

4.3.1 Measurement of Environmental Identity

As with the measurement of identity, important to the empirical investigation of EID is how specific or general the definition of this identity should be (Devine-Write & Clayton, 2010). An EID is internalised through interaction with the natural environment and supported by environmentally conscious social environments (Hinds, 2011; Hinds & Sparks, 2009; Clayton & Opotow, 2003). As EID considers a connection between the self and the natural environment as an important moral entity in its own right (Clayton & Opotow, 2003), it should be considered from a deep ecological perspective, which is where the natural environment is cared for as a holistic moral entity (Bragg, 1996). As such, the operationalisation of EID should measure underlying ideals and traits that frame a connection between the self and the holistic natural environment as an important moral entity that needs to be protected.

A number of studies have measured EID using various scales (Hinds & Sparks, 2009; Hinds & Sparks, 2008; Clayton & Opotow, 2003; Stets & Biga, 2003). Stets and Biga (2003) applied a scale with 10 items that captured how subjects felt for the natural environment. Hinds & Sparks (2008) applied three items to measure EID where they separately considered affective connection to the environment on a separate scale. Clayton and Opotow (2003) developed a 24-item scale that considered affective components within scale items. For example, in the affective connection component in Hinds and Sparks (2008) study, there was the item "sometimes when I'm unhappy I find comfort in nature" (adapted from Thompson & Barton, 1994), while Clayton and Opotow's (2003) scale asks "when I feel upset or stressed I feel better
spending time communing with nature”. As inclusion of affective items fits a conceptualisation of EID as a higher-level identity standard, the scale by Clayton and Opotow (2003) provides a more holistic and higher order measure for this research.

While initially considered as a unidimensional construct (Clayton & Opotow, 2003), the EID Scale has more recently been applied as a two dimensional construct consisting of the underlying dimensions of environmentalism, and a connection between the self and nature (Fritsche & Häfner, 2012). As such, this operationalisation provides a multidimensional measurement model, which is appropriate for the measurement of broader abstract constructs (Polites et al., 2012), which we propose an EID to be. This operationalisation has also been found as valid and reliable with reduction to 12 items using these two dimensions (Fritsche & Hafner, 2012). As is shown later in this chapter, this research ultimately applied the same two-dimensional application of the EID scale. The items from the EID Scale are presented in table 4.3.1 below and were included within the final questionnaire presented in Appendix 1.

4.3.2 Measurement of Material Identity

This research considers a MID as a higher-level identity standard that presents materialistic meaning and ideology to the self that provide the agency for the construction of more concrete identities through the pursuit of material resources provided by the consumer marketplace. However, while this research uses the terminology of a material identity (MID) for perhaps the first time, the notion of consumer and material identities has been considered from a more general perspective (e.g. Dittmar, 2011), and measures exist that adequately capture this conceptualisation.
### Table 4.3.1 - Measurement Items for EID

<table>
<thead>
<tr>
<th>EID</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID_1</td>
<td>I spend a lot of time in natural settings (forests, mountains, deserts, beaches, fields etc).*</td>
</tr>
<tr>
<td>EID_2</td>
<td>I have never seen a work of art that is as beautiful as a work of nature like a sunset or a mountain range.</td>
</tr>
<tr>
<td>EID_3</td>
<td>When I feel upset or stressed, I can feel better spending some time outdoors communing with nature.*</td>
</tr>
<tr>
<td>EID_4</td>
<td>I think of myself as part of nature not separate from it.*</td>
</tr>
<tr>
<td>EID_5</td>
<td>Living near wildlife is important to me.*</td>
</tr>
<tr>
<td>EID_6</td>
<td>I really enjoy camping and hiking outdoors.</td>
</tr>
<tr>
<td>EID_7</td>
<td>I would feel that an important part of my life was missing if I was unable to get out and enjoy nature from time to time.</td>
</tr>
<tr>
<td>EID_8</td>
<td>I feel that I receive spiritual sustenance from nature.*</td>
</tr>
<tr>
<td>EID_9</td>
<td>I like to garden.</td>
</tr>
<tr>
<td>EID_10</td>
<td>If I had enough time and/or money I would certainly donate some of it to working for environmental causes.*</td>
</tr>
<tr>
<td>EID_11</td>
<td>I have a lot in common with environmentalists as a group.*</td>
</tr>
<tr>
<td>EID_12</td>
<td>Behaving responsibly toward the earth and living a sustainable lifestyle is part of my moral code.</td>
</tr>
<tr>
<td>EID_13</td>
<td>My own interests usually seem to coincide with the position advocated by environmentalists.*</td>
</tr>
<tr>
<td>EID_14</td>
<td>Engaging in environmental behaviours is important to me.</td>
</tr>
<tr>
<td>EID_15</td>
<td>I believe that some of today’s problems could be cured by returning to a more rural lifestyle in which people live in harmony with the land.</td>
</tr>
<tr>
<td>EID_16</td>
<td>I keep mementos from the outdoors in my house such as shells, rocks or feathers.</td>
</tr>
<tr>
<td>EID_17</td>
<td>I believe that learning about the natural world should be an important part of every child’s upbringing</td>
</tr>
<tr>
<td>EID_18</td>
<td>I take pride in the fact that I could survive outdoors on my own for a few days.</td>
</tr>
<tr>
<td>EID_19</td>
<td>Sometimes I feel like parts of nature-certain trees, storms or mountains-have a personality of their own.</td>
</tr>
<tr>
<td>EID_20</td>
<td>I would rather live in a small room or house with a nice view than a bigger room or house with a view of other buildings.</td>
</tr>
<tr>
<td>EID_21</td>
<td>I feel I have a lot in common with other species.</td>
</tr>
<tr>
<td>EID_22</td>
<td>In general, being a part of the natural world is an important part of my self image.</td>
</tr>
<tr>
<td>EID_23</td>
<td>I feel that I have roots to a particular geographic location that had a significant impact on my development.</td>
</tr>
<tr>
<td>EID_24</td>
<td>Being a part of the ecosystem is an important part of who I am.</td>
</tr>
</tbody>
</table>

*Items that were included within the final measurement model following validity and reliability analysis.
The social environment encourages materialistic principles and values (Kasser et al., 2004), and as such the self will often internalise them as a higher-level identity standards, which provide the agency for the constriction of more concrete lower level identities through specific behaviours (Tsushima & Burke, 1999). Materialism has similarly been suggested to provide the agency for the construction of more specific lower level identity related goals (Shrum et al., 2013). As such, materialism relates to a higher-level identity standard that guides consumers towards material consumerist pursuits. Considering materialism as a consumer value orientation (Richins & Dawson, 1992), with such value orientations presented to the self by a higher-level identity standard (Tsushima & Burke, 1999), materialism can be considered as a value orientation presented to the self by a MID. Therefore, within this research an existing operationalisation of materialism will be applied to capture the conceptualisation of MID. The conceptualisation of materialism that best aligns with MID is that of a consumer value orientation, as operationalised by Richins and Dawson (1992). With this, people who hold materialistic values consider wealth and material acquisition as central to life, an avenue toward happiness and symbolic of success. As with the conceptualisation of materialism as identity goal pursuits (Shrum et al, 2013), acquisition is central to the concept (Richins & Dawson, 1992). Also, with material possessions considered central to life (Richins & Dawson, 1992), this conceptualisation of materialism also incorporates the arguments of Belk (1988), where possessions are seen as important parts of the self. Therefore, the operationalisation of materialism by Richins and Dawson (1992) as a consumer value orientation provides a broader conceptualisation that incorporates the meaning provided by other definitions. Furthermore, this material values scale is argued to measure materialism as a construct that influences how people interpret their external environment and subsequently structure their lives (Richins, 2004). As a higher-level identity standard determines how an individual interprets and
responds to their external environment to provide agency and guidance (Tsushima & Burke, 1999), this further supports the use of this scale for the measurement of MID.

The scale by Richins and Dawson (1992) has subsequently been heavily used in empirical research and more recently been reduced to more reliable and valid 15-item measure consisting of the 3 respective dimensions of centrality, success and happiness (Richins, 2004). It is this shortened 15-item measure that is applied within this research with the items presented in Table 4.3.2 below and the final questionnaire in Appendix 1.

Table 4.3.2 - Measurement Items for MID

<table>
<thead>
<tr>
<th>Material Identity (Materialism: A Consumer Value Orientation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Can you please indicate your agreement/disagreement as to how each of the statements on the left apply to yourself.”</td>
</tr>
<tr>
<td>MID_1</td>
</tr>
<tr>
<td>MID_2</td>
</tr>
<tr>
<td>MID_3</td>
</tr>
<tr>
<td>MID_4</td>
</tr>
<tr>
<td>MID_5</td>
</tr>
<tr>
<td>MID_6</td>
</tr>
<tr>
<td>MID_7</td>
</tr>
<tr>
<td>MID_8</td>
</tr>
<tr>
<td>MID_9</td>
</tr>
<tr>
<td>MID_10</td>
</tr>
<tr>
<td>MID_11</td>
</tr>
<tr>
<td>MID_12</td>
</tr>
<tr>
<td>MID_13</td>
</tr>
<tr>
<td>MID_14</td>
</tr>
<tr>
<td>MID_15</td>
</tr>
</tbody>
</table>

*Items that were included within the final measurement model following validity and reliability analysis.
This operationalisation of materialism as a multidimensional construct aligns with the notion of MID as a higher-level identity standard, as multidimensional models provide good measurements for such higher order constructs (Polites et al., 2012).

4.4 Questionnaire Design

With the design of a questionnaire it is important to apply a scientific approach that integrates logic, objectivity and discriminatory powers with systematic procedures to ensure that it is constructed in such a way to collect the best primary data to most accurately address the research question (Hair et al., 2008). This research was conducted from a positivist perspective and consequently applies this principal of a scientific, logical and considered approach in the creation of the primary data collection instrument, giving particular focus to the structure of the questionnaire with appropriate controls and data quality assurance methods. This includes logical consideration of the operationalisation of constructs and scales, with the clear simple wording, format and order by which these constructs are presented to the subjects.

4.4.1 Mortality Salience Manipulation

This research embeds an experimental component to consider the application of mortality salience and its impact upon the coexistence between EID and MID. The experimental design involved random assignment of subjects to the experiment and control conditions, which can be applied to increase internal validity of the primary data (Hair et al., 2008). To address the relevant hypothesis (H3), the triggering of mortality salience is applied as the experimental condition within the test group. As such, important in the design of the questionnaire is the procedure for triggering mortality salience within the test group and also the condition applied within the control group.
The most commonly applied method by which to experimentally induce mortality salience within questionnaires is to request the subjects to write about their thoughts when they think about their own death (Burke et al., 2010). As such, for the test group, the questionnaire presented two open ended questions that asked respondents about their thoughts when they considered their own death, and what they thought would happen after they died. These questions are presented in the final questionnaire shown in Appendix 1.

Of particular importance in experiments that look at the impacts of mortality salience is the selection of the control procedure to ensure that the effects are the result of the terror relating to mortality (Burke et al., 2010). A common control procedure that is applied within research relating to mortality salience is to induce thoughts relating to a visit to the dentist, as this is argued to create unpleasant thoughts within the self, however these will not relate to the theme of mortality (Burke et al., 2010). As such, for the control group within this research respondents were exposed to questions where they were required to outline what came to mind when they think about going to the dentist, and what they thought would happen next time they visit the dentist, in place of the questions relating to death.

As this research was interested in the impact of mortality salience on the identity constructs as the dependent variables, the experimental and control items were presented to the respondents early within the questionnaire following from the introduction to the respondent and regulatory focus items. As it is also recommended that a separation period is applied between mortality salience induction and the tested effects (Burke et al., 2010), respondents then completed a filler item and moved on to the demographic items within the questionnaire as these would not be affected with regards to the experimental manipulation.
4.4.2 Chronic Regulatory Focus Measurement

Chronic regulatory focus has a more enduring effect upon the self that momentary shifts within regulatory focus (Johnson & Yang, 2010). As such, the hypotheses in this research pertaining to regulatory focus considered the ability of an individual’s chronic regulatory focus to impact the likelihood for EID and MID to coexist within the self. From this, this research applied an instrument designed to measure an individual’s chronic regulatory focus, rather than manipulate the temporary regulatory focus state.

The two most commonly referenced instruments that are applied to measure an individual’s chronic regulatory focus are the Regulatory Focus Questionnaire by Higgins et al (2002), and the Promotion/Prevention Scale by Lockwood, Jordan and Kunda (2001). The Regulatory Focus Questionnaire is based on an individual’s previous success with orientations of regulatory focus and considers 11 statements with regards to an individual’s past with regards to growing up and historical interactions with parents (Higgins et al., 2001). Differently, the Promotion/Prevention Scale has 18 statements relating to chronic promotion and prevention focus goals and asks the respondent to rate how true these statements were of them (Lockwood et al., 2002). This research applies the scale by Lockwood, Jordan and Kunda (2002), as the items within this operationalisation relate specifically to the chronic regulatory focus goals held within an individual, rather than the history of success with previous orientations of promotion and prevention focus orientations. The scale by Lockwood, Jordan and Kunda (2002) has also been shown to be reliable and valid and has been consistently referenced within the marketing and consumer research literature (see Ku, Kuo, & Kuo, 2012; Malaviya & Sternthal, 2008; Nenkov & Scott, 2014; Yoon, Sarial-Abi, & Gürhan-Canli, 2011).

The items for the Promotion/Prevention Scale are presented in Table 4.4.1 and were presented to individuals prior to the mortality salience manipulation following the introduction of the
questionnaire, as shown in Appendix 1. This measurement instrument includes 9 items each for promotion focus and prevention focus. The measure was applied before the mortality salience manipulation as this research to avoid any influence of mortality salience upon the measurement of an individual’s regulatory focus orientation in seeking to only measure chronic regulatory focus.

Table 4.4.1 - Measurement Items for Chronic Regulatory Focus

<table>
<thead>
<tr>
<th>Regulatory Focus (Promotion/Prevention Scale)</th>
<th>“Please indicate how you feel about these statements.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROM_1</td>
<td>I frequently wonder how I will achieve my hopes and aspirations.</td>
</tr>
<tr>
<td>PROM_2</td>
<td>I often think about the person I would ideally like to be in the future.*</td>
</tr>
<tr>
<td>PROM_3</td>
<td>I typically focus on the success I would like to achieve in the future.*</td>
</tr>
<tr>
<td>PROM_4</td>
<td>I often think about how I will achieve success.*</td>
</tr>
<tr>
<td>PROM_5</td>
<td>I am more motivated toward preventing losses than I am toward achieving gains.</td>
</tr>
<tr>
<td>PROM_6</td>
<td>My major goal right now is to achieve my ambitions.*</td>
</tr>
<tr>
<td>PROM_7</td>
<td>I see myself as someone who is primarily striving to reach my &quot;ideal self&quot;, to fulfil my hopes, wishes and aspirations.*</td>
</tr>
<tr>
<td>PROM_8</td>
<td>In general, I am focussed on achieving positive outcomes in my life.</td>
</tr>
<tr>
<td>PROM_9</td>
<td>I often imagine myself experiencing good things I hope will happen to me.</td>
</tr>
<tr>
<td>PREV_1</td>
<td>In general, I am focussed on preventing negative things in my life.</td>
</tr>
<tr>
<td>PREV_2</td>
<td>I am anxious that I will fall short of my responsibilities and obligations.</td>
</tr>
<tr>
<td>PREV_3</td>
<td>I often think about the person I am afraid I might become in the future.*</td>
</tr>
<tr>
<td>PREV_4</td>
<td>I often worry that I will fail to accomplish my goals.*</td>
</tr>
<tr>
<td>PREV_5</td>
<td>I often imagine myself experiencing bad things I fear might happen to me.*</td>
</tr>
<tr>
<td>PREV_6</td>
<td>I frequently think about how I can prevent failures in my life.</td>
</tr>
<tr>
<td>PREV_7</td>
<td>My major goal right now is to avoid becoming a failure.*</td>
</tr>
<tr>
<td>PREV_8</td>
<td>I see myself as someone who is primarily striving to become the person I &quot;ought&quot; to be to fulfil my duties, responsibilities and obligations.</td>
</tr>
<tr>
<td>PREV_9</td>
<td>Overall, I am more oriented towards achieving success than preventing failure.</td>
</tr>
</tbody>
</table>

*Items that were included within the final measurement model following validity and reliability analysis.
4.4.3 Measurement Instruments for the Outcome Variables

**Willingness to Sacrifice to Protect the Environment (WTS).** WTS was first operationalised within the International Social Survey Program in the 1990s and has since been applied within multiple academic studies (Dono et al., 2010; Oreg & Katz-Gerro, 2006a; Stern et al., 1999). The measurement consists of 4 items that ask respondents to indicate how willing they would be to pay higher taxes, higher prices and also accept a drop in their standard of living in order to protect the environment, and if they will always do what is right for the environment even if it costs them time and money. As shown in Appendix 1, the measurement items for this construct were preceded by the statement “how willing would you be to”, which was deemed to measure the individual’s current willingness towards the sacrifices outlined in the scale. The items for this construct are presented in Table 4.4.2.

**Voluntary Simplification.** The scale to measure intentions toward voluntarily simplification used in this study were taken from the consciousness for sustainable consumption scale (Balderjahn et al., 2013), and the items from this scale have recently been applied and confirmed as reliable and valid (Hoffmann, Balderjahn, Seegebarth, Mai, & Peyer, 2018). While in the initial conceptualisation of the scale was reduced from 7 items to 3, it has since been used with 4 of the original items (Hoffmann et al., 2018), this research included all 7 of the items originally tested for the measure within the questionnaire. While the original measurement instrument introduced the items with the statement “Even if you can financially afford a product, how important is it to you personally that..”, as this research was concerned with future oriented intentions rather than previous behaviours, this was reworded to “Moving forward, even if I can financially afford it when I buy something it will be important that”. While the items themselves remained the same, this introductory statement to the items was altered as it was felt that this would provide a more accurate account of the subjects’ intentions at the time their answers were collected and hence a better indication of the impact of each
salient identity upon intentions towards voluntary simplification. The items for this construct are presented in Table 4.4.2.

**Compulsive Buying.** There are two self-reporting scales that have previously been used to measure compulsive buying. The first is a thirteen item measurement (Valence et al., 1988), that was subsequently reduced to eleven items (d’Astous, Maltais, & Roberge, 1990). The second scale consists of seven items and was developed as a clinical screener to diagnose people with compulsive buying (Faber & O’guinn, 1992). Both scales have been shown to be unidimensional and have good reliability and validity. This research will apply the shortened eleven-item version from Valence, d’Astous and Fourtier (1988). This provides a good measure with which to research variation in more sub-clinical forms of compulsive buying (Dittmar, Long, & Bond, 2007), and this research is interested in intentions toward compulsive buying on a broader spectrum which will primarily include sub-clinical levels. The scale items also provide more consideration to the actual compulsive buying behaviour, rather than the emotions associated with such behaviour, and this research seeks to determine intentions towards such behaviours rather than their associated emotions. Subjects were asked to indicate their level of agreement with the items, which were slightly reworded to relate to future oriented intentions and are presented in Table 4.4.2.

**Status Consumption.** The scale used to measure status consumption in this research will be that from Eastman, Goldsmith and Flynn (1999). This provides a valid and reliable 5 item unidimensional scale that measures the tendency of an individual to purchase as a means to grant themselves social prestige (Eastman, Goldsmith, & Flynn, 1999). The items were already worded in such a way that they relate to a more present and future oriented guidance and as such appropriate to measure the impact of salient identities upon the intentions towards status consumption. The items were preceded with a statement asking respondents to indicate their level of agreement and are presented in Table 4.4.2.
Table 4.4.2 - Measurement Items for the Outcome Variables

<table>
<thead>
<tr>
<th>Willingness to Sacrifice to Protect the Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>“How willing would you be to..”</td>
</tr>
<tr>
<td>WTS_1</td>
</tr>
<tr>
<td>WTS_2</td>
</tr>
<tr>
<td>WTS_3</td>
</tr>
<tr>
<td>WTS_4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Voluntary Simplification</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Moving forward, even if I can financially afford it when I buy something it will be important that..”</td>
</tr>
<tr>
<td>VS_1</td>
</tr>
<tr>
<td>VS_2</td>
</tr>
<tr>
<td>VS_3</td>
</tr>
<tr>
<td>VS_4</td>
</tr>
<tr>
<td>VS_5</td>
</tr>
<tr>
<td>VS_6</td>
</tr>
<tr>
<td>VS_7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compulsive Buying</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Please indicate how you feel about the following statements and they apply to you right now.”</td>
</tr>
<tr>
<td>CB_1</td>
</tr>
<tr>
<td>CB_2</td>
</tr>
<tr>
<td>CB_3</td>
</tr>
<tr>
<td>CB_4</td>
</tr>
<tr>
<td>CB_5</td>
</tr>
<tr>
<td>CB_6</td>
</tr>
<tr>
<td>CB_7</td>
</tr>
<tr>
<td>CB_8</td>
</tr>
<tr>
<td>CB_9</td>
</tr>
<tr>
<td>CB_10</td>
</tr>
<tr>
<td>CB_11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Please indicate how do you feel about the following statements as they apply to you right now.”</td>
</tr>
<tr>
<td>SC_1</td>
</tr>
<tr>
<td>SC_2</td>
</tr>
<tr>
<td>SC_3</td>
</tr>
<tr>
<td>SC_4</td>
</tr>
<tr>
<td>SC_5</td>
</tr>
</tbody>
</table>

*Items that were included within the final measurement model following validity and reliability analysis.
4.4.4 Data Quality, Filtering and Bias Control Techniques

With self-administered online questionnaires it is important to ensure the respondent maintains attention upon the items within the questionnaire to ensure validity of the data collected (Berinsky, Margolis, & Sances, 2014). Furthermore, as the respondents within the data collection received remuneration for completing the survey (see section 4.5 on sampling), it was important to ensure that these respondents were giving the required attention to the survey items, rather than to just randomly click through the survey to obtain the remuneration. To help filter such responses from the data set, screener items were inserted within the survey that requested the respondent select ‘strongly disagree’. For any respondents that did not select ‘strongly disagree’ (i.e. a negatively biased question) for screener items it was deemed they were not paying sufficient attention and their responses were removed from the data set. Furthermore, the online panel company indicated that failure to answer such questions correctly on multiple occasions resulted in removal from the panel, resulting in a better quality of respondent within the panel.

Common method bias is a well noted effect that can occur within self-administered research instruments where different constructs are measured using the same research methods (Kamakura, 2010; MacKenzie & Podsakoff, 2012). As such, to remove the negative impact that common method bias had upon the validity of the data collected within the questionnaire, a number of different response techniques for the scale points were provided to the respondents. This included the use of a combination of matrix style, drag and drop, and drop-down menu responses for the scale points, which were spread throughout the survey for the measurement instruments for the different constructs. Wording of the survey guidance was also designed to be clear and concise and care was taken to ensure there was no ambiguity within the questions as a further suggested remedy to common method bias (MacKenzie & Podsakoff, 2012).
A suggested weakness of on-line surveys is that the respondent may not know how much more they are required to complete within the survey and to address this the suggested method of a progress bar was used within the survey, to minimise the likelihood of dropout (Evans & Mathur, 2005). Furthermore, online surveys enable a forced response option that ensures the respondents address all the required items to ensure complete results (Evans & Mathur, 2005) and forced responses were applied within the questionnaire. Finally, the items within the research instrument for each construct were randomised to ensure the order of the delivery of the items to the respondent did not have an impact upon the validity of the data.

While self-selection bias has also been an argued weakness of on-line surveys (Wright, 2005), as the panel company provided remuneration to survey respondents and links to individual panel members with an invitation to participate in a survey, this should have served to largely remove self-selection bias from the sample, as respondents were unaware of the survey content prior to commencing. As such, the only self-selection bias that would exist within the data collected should relate to bias that would relate to an individual signing up to be a member of the survey panel population.

As participants were provided with cash equivalent points for their participation within the research survey, this may have had the potential to create bias within the sample by attracting participants who were more partial to receiving such cash equivalent points, and hence those more likely to have a MID. However, as the cash equivalents were considered to be relatively small, this was deemed to be unlikely to have any significant impact upon the results.

4.4.5 Survey Structure, Wording and Pre-Testing

To maximise the validity of the responses to the questionnaire, it is important the wording of the items to measure the constructs is simple and clear with no ambiguity (Hair et al., 2008).
As such, the questionnaire was designed with simple wording and the questions were presented with a plain format and font. The questionnaire opened with a short introduction to the respondents ensuring them of their anonymity within the research process and provided the contact details of the researcher. Following the introduction and items from the promotion/prevention scale, the questionnaires either presented the mortality salience manipulation or the dentist control items, which were followed by a quick filler task and the demographic items. The demographic items and filler task were presented after the experimental manipulation as is it is argued that after mortality salience manipulation a small time lapse is required (Burke et al., 2010), and this manipulation would not affect individual responses to the demographic items so they were applied after the manipulation to make the survey more efficient. The respondents were then presented with the measurement items for MID and EID respectively, and then the items for status consumption, compulsive buying, WTS and voluntary simplification.

Pre-testing of questionnaires is important to ensure readability of the questions and intended understanding of the items among the respondents. A convenience sample of 5 academics and 7 members of the general population with an even spread of age and gender were presented the initial draft of the questionnaire, with 6 presented the dentist control questionnaire and 6 presented with the mortality salience manipulation. Respondents were asked to provide feedback on the readability and wording of the questionnaire and to identify any areas of ambiguity. Respondents provided minor areas for feedback which was incorporated within a few changes in the language guiding the respondents.
4.5 Sampling

Important to collecting the data to address the research question is to consider the most appropriate population by which to collect the data (Hair et al., 2008). EID and MID are likely to be constructed within advanced Western cultures. As this research is based in Australia, it is considered that the Australian general population will provide an appropriate sampling frame by which to collect valid data to address the research questions and hypotheses.

4.5.1 Sampling Method

A common method applied within online surveys to effectively recruit a representative sample from the target population is to source the services of a company that has a large representative panel of respondents from within the sampling frame that can be easily and quickly reached (Evans & Mathur, 2005; Hays, Liu, & Kapteyn, 2015). As such, for this research the services of an online panel company, Qualtrics, were utilised in order to collect a representative and efficient probability sample from the Australian general population. Panel companies can be used to gain access to demographically balanced panels (Evans & Mathur, 2005), and it was requested that the panel company seek an even spread across the demographic variables of gender, age and income to limit the effect that the overrepresentation of any group from these broad demographics might have on the data. Therefore, in using the panel company this research applied a combination of random sampling and quota sampling. It was also requested that 50% of the completed surveys included the mortality salience manipulation and the other 50% were exposed to the control condition.

In order to properly conduct statistical analysis from a sample taken from a population, probability sampling is required (Hair et al., 2008). As such, it was considered that a probability sampling method would provide the most reliable data by which the hypotheses
could be addressed, and the sampling process Qualtrics followed within their panel was random where any member from within the sampling frame had an equal non-zero chance of participating. With this process of data collection, links that led to the surveys were emailed to respondents that fell within the sampling frame from the Qualtrics panel. Eligible respondents were invited to participate by clicking the link that led them to either the test or control online survey. For their participation, participants from the panel received cash-equivalent points, which can be used for airline tickets, gift cards, magazine subscriptions etc. as incentive to participate within the survey, which is pre-arranged between Qualtrics and their panel members. Respondents were provided with the email address of the researcher for if they had any questions with regards to the questionnaire and only one email was received, with the respondent indicating they appreciated the survey content.

Respondents were locked out and no longer able to click the link when they had already completed the questionnaire and were only sent a single link for either the test or control survey to ensure no respondent was not able to complete both questionnaires. Respondents were also locked out of the questionnaire if their particular demographic quotas had already been filled prior to them clicking the link, to ensure the data was representative across demographics.

As respondents were invited to complete the survey through a link and not provided with any information about the survey contents and offered remuneration for completion of the survey, it was deemed that the online panel would serve to remove non-response bias. With one issue from non-response relating to the impact on the lack of completed surveys (Evans & Mathur, 2005), the number of completes contracted by the panel company to collect removed this as it guaranteed the required responses. Furthermore, as the other issue of non-response bias involves differences that exist between those who completed the survey and those that did not (Evans & Mathur, 2005), the link provided with remuneration to complete the survey was also anticipated to reduce the differences between the sample that completed to the survey and the
sampling frame as a whole. While it could be argued that there would be bias relating to differences between the members of the panel who belonged to the sampling frame and the sampling frame as a whole, as panels such as Qualtrics are designed to be representative (Hays et al., 2015), this was also not anticipated to influence the quality of the data collected.

4.5.2 Sample Size and Sampling Frame

The population by which to collect the sample for this research was the Australian general population. However, it should be noted that this research was not seeking results that reflect the Australian general population per se, but rather variance in the salience of EID and MID between respondents to measure the impact of this variance on the guidance of consumerist and environmental intentions. As such, it was considered that as a more individualistic and heterogenous society, the Australian general population would provide this variance through diversity seen within randomly sampled respondents within this sampling frame. Furthermore, it was also deemed that the adult population would be more appropriate as adults will have better developed identities than adolescents. As such, the sampling frame from within this research consisted of adults within the Australian general population that were members of the Qualtrics panel, which was considered to be representative of the diversity within the Australian general population.

Links were emailed randomly to members of the sampling frame until the purchased completes had been collected. 240 completes was arranged, which was considered to provide a sufficient sample to provide variance within the investigated identities for statistical analysis to address the research hypotheses. From this, 120 were to be completed for the mortality salience test survey with the other 120 to complete the dentist question control survey, with a relatively even
distribution of gender, age and household income. The 240 completes were collected within 48 hours of the survey launch.

4.6 Data Preparation

4.6.1 Data Cleaning

Following collection of the 240 completes, the data was downloaded from Qualtrics into an SPSS data file to commence processing and analysis of the data within SPSS 24. When the data was imported into SPSS, the demographic data was first observed to ensure all respondents were 18 years of age or over and all respondents were confirmed over 18. The responses for the screener questions was then observed to ensure all respondents within the data set had correctly responded to this question and there were 7 respondents who had incorrectly responded to this item who were subsequently removed from the data set. Within the SPSS data file, the scale points were automatically coded with numerical values, with those for the Likert scales ordered from 1 to 7 (1 = Strongly Disagree to 7 = Strongly Agree). Following removal of the respondents who failed the screener items, reverse coded items were recoded using the “Recode into Same Variables” option so the aggregated constructs were properly representative of the meaning of the responses.

To ensure proper validity of the data within self-administered surveys, it is important to ensure that the data was provided by the respondents with sufficient attention and understanding of the items (Berinsky et al., 2014). As such, following the recoding of the variables, the data was manually observed by the researcher for patterns and significant inconsistencies representing high likelihood of inattention to the questionnaire items. Suspected inattention within responses was also compared with the time data that was collected for each survey. The combination of time taken to complete the survey was considered with any unexpected patterns.
within responses was applied and it was deemed that there were an additional 22 responses that contained likely inattention, which were subsequently removed from the data set.

As Table 4.6.1 shows, the final sample following cleaning of the data had a total of 211 responses, with 103 respondents from the mortality salience manipulation condition and 108 respondents from the dentist control condition.

<table>
<thead>
<tr>
<th>Table 4.6.1 - Final Sample Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>211</td>
</tr>
<tr>
<td><strong>Experimental Condition</strong></td>
</tr>
<tr>
<td>Mortality Salience</td>
</tr>
<tr>
<td>103</td>
</tr>
<tr>
<td>Dentist Control</td>
</tr>
<tr>
<td>108</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>113</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>98</td>
</tr>
<tr>
<td><strong>Age Distribution</strong></td>
</tr>
<tr>
<td>18-25</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>26-35</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>36-45</td>
</tr>
<tr>
<td>33</td>
</tr>
<tr>
<td>46-55</td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td>56-65</td>
</tr>
<tr>
<td>52</td>
</tr>
<tr>
<td>66-75</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>75+</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td><strong>Weekly Household Income</strong></td>
</tr>
<tr>
<td>Under $600</td>
</tr>
<tr>
<td>63</td>
</tr>
<tr>
<td>$600 - $999</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>$1,000 - $1,499</td>
</tr>
<tr>
<td>36</td>
</tr>
<tr>
<td>$1,500 - $1,999</td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td>$2,000 - $2,999</td>
</tr>
<tr>
<td>43</td>
</tr>
<tr>
<td>$2,000 - $3,999</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>$3,000 - $3,999</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>$4,000+</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

4.6.2 Composite Scores for Latent Constructs

In order to address the research question and hypotheses, this research applied moderation analysis using SmartPLS 3.0, which required the creation of composite scores for the creation of the PLS-SEM models. While this research applied latent constructs with multiple observed variables, in order to apply the multidimensional latent constructs for EID and MID within the PLS-SEM models for moderation analysis, the sub-dimensions needed to be reduced to
singular variables for each construct in order for SmartPLS to calculate the interaction terms (see 4.8.2). As such, this research calculated composite scores for the latent constructs, as the calculation of such composite scores provides an effective means by which to reduce the data to a single construct score (Rowe, 2002). The calculation of composite scores for latent constructs can offer better stability and can also reduce the effects that can be caused by the more unique components of each of the observed variables and provided the construct data as a singular variable/score that then be applied to the models within the SmartPLS models.

Aggregating the observed variables from latent constructs to calculate composite scores has been frequently applied in the past, however it is important to follow the correct protocols within this process (Plewa, Conduit, Quester, & Johnson, 2015). Within this research, the process of creating the composite variables first involved the creation of congeneric measurement models within AMOS 24, that are presented in the next section, 4.7. These congeneric models both enabled the confirmation of convergent validity, model fit, and also provided the factor loadings of the observed variables to the latent constructs that were used to calculate the composite scores for those constructs.

Following confirmation of construct validity and reliability, the factor loadings for each observed variable is divided by the sum of all the retained observed variables for that latent construct to obtain a proportionately weighted score for each observed variable. Using the “Compute Variable” function within SPSS, each observed variable score is multiplied by its proportionately weighted score to provide the final weighted score for that observed variable. Lastly, the final weighted scores for each item are summed to provide the final composite score for the construct.

For the multidimensional EID and MID constructs, the above process was followed to provide composite scores for each of the sub-dimensions. Here, CFA was run for each of the higher-
order constructs, where model fit, convergent validity and discriminant validity was also confirmed. The resulting factor loadings were then used to calculate the composite scores for each of the sub-dimensions.

Rather than simply using unweighted averages of the observed variables to calculate the composite scores, applying this method for the calculation of composite scores applies the random measurement error and different factor loadings for each observed variable (Rowe, 2002). As such, the different observed variables that create the latent construct (sub-dimension) provide varying contributions to the final composite score that is reflective of their relative factor loading upon the latent construct. These composite scores were applied as part of the hypothesis testing within the next chapter.

4.7 Construct Measurement Validity and Reliability

The measurement instruments in this research outlined in this chapter present latent constructs that are measured using observable variables. The multiple observed variables (the stated measurement items) combine to measure the broader abstract latent construct, and as such represent a good method by which to look at the complex constructs of interest that the research hopes to measure (Hair, Black, Babin, Anderson, & Tatham, 2012). When using such measures, it is important to determine the validity of the latent constructs to ensure they measure what is intended and to also not measure what is not intended (Kline, 2005). To test construct validity, marketing and consumer research typically applies confirmatory factor analysis (CFA) (Jarvis, MacKenzie, & Podsakoff, 2003).

When assessing construct validity, it is important to determine both convergent validity, which refers to whether the items within the measure are correlated in their measurement of the intended construct, discriminant validity, which ensures the items for the intended construct do
not correlate with those from a different construct (Peter, 1981), and face validity, which relates to expert agreement as to the robustness of the measurement (Babin & Zikmund, 2015). As per the outline of the measurement scales earlier in this chapter, face validity was established in this study through the careful selection of measurement tools that have all been well established in previous research. To assess construct validity, the convergent and discriminant validity of the latent constructs was tested through CFA within AMOS 24, which is a covariance based structural equation modelling (CB-SEM) program commonly used to conduct CFA within marketing and consumer literature (Hair, Gabriel, & Patel, 2014). The metrics provided within the CFA models run within AMOS were also used within Microsoft Excel 2016 to determine the reliability of the measurements.

4.7.1 Congeneric Models of the Latent Constructs

Convergent validity was tested by running model fit for each of the constructs being considered using AMOS 24. The congreneric models of the multifactor identity constructs as well as all the single factor constructs were first tested individually. When there is convergent validity within a latent construct, this should be reflected within a high degree of common variance between the observed variables of that latent construct (Hair, Black, et al., 2012). When assessing this convergent validity within AMOS, there are multiple indicators that will typically be considered in assessing model fit (Hooper, Coughlan, & Mullen, 2008).

The first indicator for model fit that was applied was Chi-Square, which for good model fit is also required to have non-significance met, with the p-value greater than .05. However, with more complex models it is argued that this p-value becomes less relevant when such models have larger numbers of observed variables (Hair, Black, et al., 2012; Hooper et al., 2008), as is the case with the multidimensional EID and MID constructs within this research. Further to the Chi-Square, for acceptable model-fit and convergent validity, the Normed Chi-Square
should lie between 1 and 3 (Hair, Black, et al., 2012), however it should be noted that is has also been suggested that there is no consensus on this ratio (Hooper et al., 2008). The Normed Chi-Square is calculated by dividing the Chi-Square by the degrees of freedom in the model.

Root mean square error of approximation (RMSEA) is a score that assesses how poor the fit of the model is and has become regarded as one of the most informative of the fit indices with its sensitivity to the quantity of estimated parameters within the model (Hooper et al., 2008). Lower RMSEA scores will represent better fit, with a values of over .08 generally considered over the cut off point for acceptable fit (Hooper et al., 2008), while values below .05 indicate good fit (Hair, Black, et al., 2012).

The Goodness-of-Fit Statistic (GFI) looks at the variances and covariances and shows how well the model replicates the observed covariance matrix (Hooper et al., 2008). The score ranges from 0 to 1 with models that present a score of .90 or over typically considered to have acceptable fit (Hair, Black, et al., 2012). With the flaws that are argued to accompany this test based on issues relating to sample size, this is not relied upon as a stand-alone test but still has significant relevance in determining model fit (Hooper et al., 2008).

The other indices that this research used to determine model fit and by extension convergent validity are the Normed Fit Index (NFI), the Comparative Fit Index (CFI) and the Tucker Lewis Index (TLI), which are incremental fit indices that compare the Chi-Square value to the baseline model (Hooper et al., 2008). The NFI compares the Chi-Square score of the model to that of the Chi-Square of the null model, and values above .95 are considered to provide good fit. The TLI is also known as the Non-Normed Fit Index (NNFI), and can have values rise slightly above 1 or below 0 (Hooper et al., 2008). TLI values of over .95 are representative of good fit (Hair, Black, et al., 2012). Finally, the CFI is revised from NFI an also takes into account sample size, where a value over .95 will represent good fit (Hair, Black, et al., 2012).
Figures 4.7.1 and 4.7.2 below present the multidimensional congeneric models of MID and EID respectively, while figures 4.7.4 to 4.7.9 present to single dimensional congeneric models for regulatory focus and the outcome variables. Each figure is followed by the respective tables presenting the associated fit indices outlined above for each model.

**Figure 4.7.1 - Congeneric Measurement Model for MID**

![Diagram of the multidimensional congeneric measurement model for MID]

**Table 4.7.1 - Goodness of Fit Indices for MID**

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>X²</th>
<th>df</th>
<th>X²/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.043</td>
<td>56.82</td>
<td>41</td>
<td>1.386</td>
<td>.051</td>
<td>.983</td>
<td>.955</td>
<td>.941</td>
<td>.977</td>
</tr>
</tbody>
</table>

Figure 4.7.1 and Table 4.7.1 present the multidimensional congeneric measurement model used to determine MID and the associated fit indices respectively. Following the removal of 4 items from the original construct, the final model consisted of 3 sub-dimensions, of material
acquisition as a source of ‘success’, ‘happiness’ and ‘centrality’ to life, consistent with previous operationalisations of the materialism construct (Richins, 2004; Richins & Dawson, 1992). Each of the retained observed variables for the sub-dimensions had a loading of over .5, and the three sub-dimensions also presented good loadings to the higher order MID factor. Furthermore, nearly all of the resulting fit indices were all within the range indicating good model fit. While, the NFI is slightly below .95, as the other indices were well within the range for good fit, the above measurement model for MID demonstrates acceptable convergent validity and model fit. As such, the above measurement model for MID also provides the factor loadings by which the composite scores for the MID sub-dimensions were calculated.

Figure 4.7.2 - Multidimensional Measurement Model for EID
Table 4.7.2 - Goodness of Fit Indices for EID

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.053</td>
<td>63.357</td>
<td>26</td>
<td>2.437</td>
<td>.000</td>
<td>.964</td>
<td>.936</td>
<td>.940</td>
<td>.950</td>
</tr>
</tbody>
</table>

Figure 4.7.2 and Table 4.7.2 present the 2 sub-dimensions being used for the measurement of EID and the associated fit indices respectively. Following the removal of 15 items from the original construct, this presents a shortened model of the EID construct that consisted of the 2 sub-dimensions of ‘environmentalism’ and connection between the self as ‘part of nature’, as has been done in the past (Fritsche & Häfner, 2012). All of the retained observed variables for the sub-dimensions had a loading of over .5. While the fit indices were predominantly within the range that indicates good model fit, the significance of the Chi-Square was below .05. However it is recognised that models which have a large number of observed variables will be less likely to obtain a larger p-value (Hooper et al., 2008), and as such the p-value below .05 was less relevant and likely to be seen within this more complex model. While, the NFI is also slightly below .95 at .94, as the other indices were well within the range for good fit, the above measurement model for EID demonstrates acceptable convergent validity and provides the factor loadings by which composite scores for the sub-dimensions of EID were calculated.

As there are only 2 sub-dimensions within this operationalisation of EID, it was not possible to draw the full multidimensional model as was done with MID within AMOS, as it did not have enough degrees of freedom to properly run. As such, to obtain the loadings of the sub-dimensions onto the latent EID factor, the composite scores for the two sub-dimensions of ‘environmentalism’ and ‘part of nature’ were loaded onto the latent EID factor and run with all the other latent construct measures in this research in the test for discriminant validity (presented later in this chapter). As shown in Figure 4.7.3 below, the sub-dimension composite scores loaded acceptably onto the latent EID factor.
Figure 4.7.3 - Higher Order Measurement Model for EID

![Figure 4.7.3](image)

Figure 4.7.4 - Congeneric Measurement Model for Chronic Promotion Focus

![Figure 4.7.4](image)

Table 4.7.3 - Goodness of Fit Indices for Chronic Promotion Focus

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.058</td>
<td>8.562</td>
<td>5</td>
<td>1.712</td>
<td>.128</td>
<td>.994</td>
<td>.985</td>
<td>.985</td>
<td>.987</td>
</tr>
</tbody>
</table>

Figure 4.7.4 and Table 4.7.3 present the single factor congeneric measurement model used to determine Promotion Focus and the associated fit indices respectively. Following the removal of 4 items from the original construct, all of the retained observed variables had a loading of...
over .5. Furthermore, all the fit indices were within the range that indicates good model fit. As such, the above measurement model for Promotion Focus demonstrates good convergent validity.

Figure 4.7.5 - Congeneric Measurement Model for Chronic Prevention Focus

Table 4.7.4 - Goodness of Fit Indices for Chronic Prevention Focus

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.057</td>
<td>3.386</td>
<td>2</td>
<td>1.693</td>
<td>.184</td>
<td>.996</td>
<td>.998</td>
<td>.990</td>
<td>.987</td>
</tr>
</tbody>
</table>

Figure 4.7.5 and Table 4.7.4 present the single factor congeneric measurement model used to determine Prevention Focus and the associated fit indices respectively. Following the removal of 5 items from the original construct, all of the retained observed variables had a loading of over .5. Furthermore, all the fit indices were within the range that indicates good model fit. As such, the above measurement model for Prevention Focus demonstrates good convergent validity.
Figure 4.7.6 - Congeneric Measurement Model for WTS

Table 4.7.5 - Goodness of Fit Indices for WTS

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.089</td>
<td>2.653</td>
<td>1</td>
<td>2.659</td>
<td>.103</td>
<td>.996</td>
<td>.992</td>
<td>.994</td>
<td>.988</td>
</tr>
</tbody>
</table>

Figure 4.7.6 and Table 4.7.5 present the single factor congeneric measurement model used to determine WTS and the associated fit indices respectively. By retaining all but one of the items from the original construct, all of the observed variables had a loading of over .7. While nearly all of the fit indices were within the range that indicates good model fit, the RMSEA was .089. However, as the remainder of the indices were in the range for good fit, the above measurement model for WTS demonstrates acceptable convergent validity.

Figure 4.7.7 - Congeneric Measurement Model for Voluntary Simplification
Table 4.7.6 - Goodness of Fit Indices for Voluntary Simplification

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.07</td>
<td>10.188</td>
<td>5</td>
<td>2.038</td>
<td>.070</td>
<td>.986</td>
<td>.982</td>
<td>.973</td>
<td>.971</td>
</tr>
</tbody>
</table>

Figure 4.7.7 and Table 4.7.6 present the single factor congeneric measurement model used to determine Voluntary Simplification and the associated fit indices respectively. Following the removal of 2 of the observed variables measured, all of the retained observed variables had a loading of over .5. Furthermore, all the fit indices were within the range that indicates good model fit. As such, the above measurement model for Voluntary Simplification demonstrates good convergent validity.

Figure 4.7.8 - Congeneric Measurement Model for Status Consumption

![Congeneric Measurement Model for Status Consumption](image)

Table 4.7.7 - Goodness of Fit Indices for Status Consumption

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.036</td>
<td>2.551</td>
<td>2</td>
<td>1.276</td>
<td>.279</td>
<td>.999</td>
<td>.994</td>
<td>.996</td>
<td>.997</td>
</tr>
</tbody>
</table>

Figure 4.7.8 and Table 4.7.7 present the single factor congeneric measurement model used to determine Status Consumption and the associated fit indices respectively. Following the removal of 1 item from the original construct, all of the retained observed variables had a
loading of over .8. Furthermore, all the fit indices were within the range that indicates good model fit. As such, the above measurement model for Status Consumption demonstrates good convergent validity.

Figure 4.7.9 - Measurement Model for Compulsive Buying

![Measurement Model for Compulsive Buying](image)

Table 4.7.8 - Goodness of Fit Indices for Compulsive Buying

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.046</td>
<td>20.129</td>
<td>14</td>
<td>1.870</td>
<td>.126</td>
<td>.993</td>
<td>.972</td>
<td>.976</td>
<td>.989</td>
</tr>
</tbody>
</table>

Figure 4.7.9 and Table 4.7.8 present the single factor congeneric measurement model used to determine Compulsive Buying and the associated fit indices respectively. Following the removal of 3 items from the original construct, all of the retained observed variables had a loading of over .6. Furthermore, all the fit indices were within the range that indicates good model fit. As such, the above measurement model for Compulsive Buying demonstrates good convergent validity.
4.7.2 Discriminant Validity and Reliability

The congeneric models within the previous section showed the observed variables loaded well onto the latent constructs they are intendent to measure showing convergent validity and model fit within the measurements being used. It is also important to determine discriminant validity by showing that each of the latent measurements are representative of unique constructs. Determining discriminant validity involves showing that the observed variables that are being used to measure the latent constructs relate specifically to that construct and are not associated with other measurement constructs (Hair, Black, et al., 2012).

Determining discriminant validity is demonstrated by showing that the observed variables of a latent construct account for more variance within that latent construct than all other latent constructs of interest. As such, to determine discriminant validity all the latent measurement constructs were included within a single measurement model in AMOS 24 where covariances were drawn between each of the latent constructs. Within this holistic model, the loadings of each of the observed variables onto their latent factors were used to determine within Microsoft Excel 2016 the average variance extracted (AVE) from that construct. The highest correlation for each latent construct within the model to another latent construct within the model were then taken and squared to create the highest squared correlation (HSC) score. If the AVE is higher than the HSC for a latent construct, this shows that the observed variables for that construct explain more of the variance within that construct than any of the other latent constructs within the model. As such, discriminant validity is shown when the AVE is higher than the HSC for that latent construct measurement. AVE scores of .5 or higher also further confirm the convergent validity within the constructs.

Finally, for determining the appropriateness of the measurements for the constructs considered, it is important to determine the reliability of the measures to ensure their internal consistency.
and that they are largely free from random error in measuring what they are intended to measure (Hair, Black, et al., 2012). Using the measurement model where all the latent constructs were included, the factor loadings of the observed variables onto their latent factors were also used to determine the construct reliability measure, which has been argued to provide a better measure for reliability as it allows the weights to vary when compared to the more commonly used Chronbach’s Alpha (Peterson & Kim, 2013). For good reliability, the construct reliability measure for a construct should be .7 or higher (Hair, Black, et al., 2012).

To simplify this holistic AMOS model that included all the constructs measured, the EID and MID constructs were included as single dimensional constructs using the composite scores that were developed for each sub-dimension using the factor loadings for each of the observed variables onto that sub-dimension. As such, first it was important to determine the discriminant validity and reliability for each of the sub-dimensions of EID and MID. For this, all five sub-dimensions for both constructs were drawn up in an AMOS measurement model with covariances drawn between each latent factor (sub-dimension). The results for this are presented in Table 4.7.9 below.

Table 4.7.9 shows that the measures for the two sub-dimensions for EID and the three for MID are reliable and distinct from one another with discriminant validity. The AVE for all the sub-dimensions for both identity constructs were .5 or over, and the construct reliability scores all greater than .7, indicating convergent validity and construct reliability respectively. As the sub-dimensions for EID were part of the same higher order construct, they had a high covariance of .6, however the AVE for both dimensions was still greater than the HSC, indicating that the sub-dimensions were still distinct constructs with discriminant validity. Similarly, there was a high covariance of .61 between the Success and Happiness sub-dimensions of MID, but again the AVE of each was greater than the resulting HSC, again showing discriminant validity. As such, the measures for the sub-dimensions of both EID and
MID were deemed reliable with convergent and discriminant validity, and the factor loadings were used to create composite scores for these sub-dimensions as described in section 4.6.2. The sub-dimension composite scores were then included as the observed variables for the EID and the MID latent constructs within the full AMOS model that included all the measurement constructs being considered within this research. The results are presented in table 4.7.10 below.

| Table 4.7.9 - Discriminant Validity and Reliability of EID and MID Sub-Dimensions |
|---------------------------------|---------|--------|---------|---------|
| Scale Items                    | Loadings | Correlations | Construct Reliability | AVE | HSC |
| Environmentalist (EID)         |          |            |                      |     |     |
| EID_10                         | 0.80     | 0.64      |                      |     |     |
| EID_11                         | 0.94     | 0.87      |                      |     |     |
| EID_13                         | 0.74     | 0.54      |                      |     |     |
| Connection between the Self and Nature (EID) |          |            |                      |     |     |
| EID_1                          | 0.72     | 0.52      |                      |     |     |
| EID_3                          | 0.80     | 0.64      |                      |     |     |
| EID_4                          | 0.80     | 0.64      |                      |     |     |
| EID_5                          | 0.77     | 0.59      |                      |     |     |
| EID_7                          | 0.77     | 0.60      |                      |     |     |
| EID_8                          | 0.68     | 0.46      |                      |     |     |
| Success (MID)                  |          |            |                      |     |     |
| MID_1                          | 0.79     | 0.62      |                      |     |     |
| MID_2                          | 0.76     | 0.58      |                      |     |     |
| MID_4                          | 0.73     | 0.54      |                      |     |     |
| MID_5                          | 0.78     | 0.61      |                      |     |     |
| Happiness (MID)                |          |            |                      |     |     |
| MID_11                         | 0.59     | 0.35      |                      |     |     |
| MID_12                         | 0.81     | 0.65      |                      |     |     |
| MID_14                         | 0.87     | 0.76      |                      |     |     |
| MID_15                         | 0.73     | 0.53      |                      |     |     |
| Centrality (MID)               |          |            |                      |     |     |
| MID_6                          | 0.63     | 0.40      |                      |     |     |
| MID_7                          | 0.75     | 0.57      |                      |     |     |
| MID_10                         | 0.73     | 0.53      |                      |     |     |
Table 4.7.10 - Discriminant Validity and Reliability of the Latent Measurement Constructs

<table>
<thead>
<tr>
<th>Scale</th>
<th>Loadings</th>
<th>Correlations</th>
<th>Construct Reliability</th>
<th>AVE</th>
<th>HSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID</td>
<td></td>
<td></td>
<td></td>
<td>0.80</td>
<td>0.57</td>
</tr>
<tr>
<td>Success (composite)</td>
<td>0.87</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happiness (composite)</td>
<td>0.69</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrality (composite)</td>
<td>0.70</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EID</td>
<td></td>
<td></td>
<td></td>
<td>0.73</td>
<td>0.59</td>
</tr>
<tr>
<td>Environmentalist (composite)</td>
<td>0.89</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection between the self and nature (composite)</td>
<td>0.63</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to Sacrifice to Protect the Environment</td>
<td></td>
<td></td>
<td></td>
<td>0.87</td>
<td>0.70</td>
</tr>
<tr>
<td>WTS_1</td>
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<tr>
<td>Compulsive buying</td>
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</tr>
<tr>
<td>CB_3</td>
<td>0.71</td>
<td>0.50</td>
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<td>0.42</td>
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</tbody>
</table>
Table 4.7 shows that the measures for all the latent constructs are reliable and distinct from one another with discriminant validity. The AVE for all the latent constructs were .5 or over, and the construct reliability scores all greater than .7, indicating convergent validity and construct reliability respectively. There were some high covariances between a number of the constructs, with EID and Willingness to Sacrifice to Protect the Environment having at .73, and MID and Status Consumption at .72, however, however the AVE for these and all other latent constructs were still greater than the resulting HSC. Thus, indicating that all were distinct constructs. As such, the measures for the constructs being considered within this research were deemed reliable and had both convergent and discriminant validity.

4.7.3 Common Method Bias

Also important in confirming the quality of the data is to eliminate the possibility that common method bias has affected the responses. Common method bias refers to when the data collection method can adversely impact the validity, reliability and the covariation of the constructs within the data and can be caused by a number of factors (MacKenzie & Podsakoff, 2012). While this research applied a number of techniques to reduce the likelihood of common method bias as outlined earlier in this chapter, the data was also tested to ensure it was largely free from this bias.

To test for common method bias, the Harman’s single factor technique was used where all the retained observed variables for all the measurement constructs were loaded onto a single latent variable and tested for model fit within AMOS (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). If there is good model fit based on the fit indices outlined in section 4.7.1 then this would indicate that the variance within all the observed variables could be accounted for onto a single general factor. Table 4.7.11 below shows the fit indices for the single factor with all
the retained observed variables has extremely poor model fit and this is indicative that the data is free from common method bias.

Table 4.7.11 - Goodness of Fit Indices for testing Common Method Bias

<table>
<thead>
<tr>
<th>RMSEA</th>
<th>$X^2$</th>
<th>df</th>
<th>$X^2$/df</th>
<th>p</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.135</td>
<td>5217.7</td>
<td>1080</td>
<td>4.831</td>
<td>.000</td>
<td>.330</td>
<td>.352</td>
<td>.285</td>
<td>.300</td>
</tr>
</tbody>
</table>

4.8 Hypotheses Testing using Partial Least Squares Structural Equation Modelling

This research investigates the conditions at which predictor variables are able to influence hypothesised outcome variables. Specifically, it investigates the impact of a number of moderator variables to influence the magnitude of the relationship between EID and MID, and the relationship between these variables (i.e. EID and MID) and the various outcome variables they are predicted to influence. Hypotheses 2a, 8a, and 8b, predict a negative moderating effect where chronic promotion focus and MID are suggested to weaken the impact of EID upon MID, WTS and voluntary simplification respectively. Differently, hypotheses 2b and 3 predict an interaction effect where chronic prevention focus and mortality salience are suggested to strengthen the relationship between EID and MID. As such, important to this research is the data analysis procedure by which the hypothesised moderating effects on the relationship between the predictor and outcome variables is tested.

To determine a moderating effect (also called an interaction effect) on the relationship between a predictor and outcome variable, it needs to be shown that the nature of the relationship changes with changes in the hypothesised moderating variable (Aiken, West, & Reno, 1991). Moderating variables can either be categorical or metric (Henseler & Fassott, 2010), and this research is specifically interested in identifying potential moderation of the relationship between latent constructs using both a dichotomous categorical variable (mortality salience)
and metric latent constructs (promotion focus, prevention focus, EID and MID) as the moderating variables. As such, the analysis method chosen needs to enable testing of the dichotomous categorical variables and continuous latent moderator variables upon the relationship between predictor and outcome latent variables.

4.8.1 Partial Least Squares Structural Equation Modelling

Structural equation modelling (SEM) provides a standard analytical procedure frequently used in marketing research to understand relationships between latent variables (Hair, Sarstedt, Ringle, & Mena, 2012). In the majority of structural equation models moderation effects have not been considered despite the literature having frequently recognised the importance of understanding of moderation within more complex models (Henseler & Fassott, 2010). While the more commonly used covariance based structural equation modelling (CB-SEM) technique enables the testing of moderation using categorical variables, it does not enable the testing of moderation using continuous latent variables, as is required for this research (Matthews, Hair, & Matthews, 2018). Differently, partial least squares structural equation modelling (PLS-SEM) is a technique that has had a significant growth in usage in recent years within business research (Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014), while importantly enabling the analysis of more complex models and providing multiple options by which both categorical and continuous latent moderator variables can be tested (Henseler & Fassott, 2010). Hence, PLS-SEM provides a technique that can be used to analyse the data and test the moderation effects hypothesised within the research.

While CB-SEM is based on the common factor model and is focussed only on common variance within the data, PLS-SEM is based on the composite factor model where the statistical aim is to maximise the variance explained in the dependent variable (Matthews et al., 2018).
Each approach is noted to have its own strengths and weaknesses, where the appropriate application of each will be dependent upon the objectives and context of the research (Hair Jr et al., 2014). It is argued that if the purpose of the research is prediction, explanation and theory development then PLS-SEM is recommended (Matthews et al., 2018). As the hypotheses in this research predict moderating effects of latent variables to better explain the potential conflict between two identities within the self, to help further develop identity theory, and PLS-SEM enables the testing of such moderation (Henseler & Fassott, 2010), PLS-SEM provides an appropriate technique to apply within this research and address the research question. While the measures for this research were confirmed reliable and valid using CB-SEM, it is recognised that PLS-SEM can be considered complementary to CB-SEM (Hair et al., 2014).

PLS-SEM has experienced significant growth and usage and increased academic attention in recent years, particularly within marketing (Hair Jr et al., 2014). While PLS-SEM has frequently been applied in the past based on non-normal data, formative indicators and small sample sizes, its growing application within a broad range of methodological research has resulted in extensions that enable the investigation of more complex models, which importantly include moderation with latent variables (Hair Jr et al., 2014). As such, the application of PLS-SEM within this research will utilize a growing statistical analysis technique that provides the flexibility and power by which to analyse the models that include continuous latent moderating variables.

PLS-SEM provides an appropriate method by which to determine direct relationships between independent and dependent latent variables (Henseler, Ringle, & Sinkovics, 2009) and this research applies PLS-SEM to determine the direct relationships hypothesised from the identity constructs within this research. As such, the PLS Algorithm within SmartPLS 3.0 was used to determine the direct causal relationships hypothesised between the identities and the outcome variables.
To determine the direct causal relationships hypothesised, the models were built within SmartPLS, with the composite scores for the sub-dimensions of the identity constructs loaded onto their latent factors, and the observed variables as per the congeneric models in section 4.7.1 for the other latent constructs. Once the models had been built with their respective variables, they were run with the PLS Algorithm with the ‘Path’ weighting scheme and 10,000 maximum iterations. The PLS algorithm involves three stages, where the stage involves an iterative estimation of latent variable scores, the second provides an estimation of the loadings and path coefficients, and the third is an estimation of location parameters (Henseler et al., 2009). Once the PLS Algorithm had been run to provide the metrics and the R Square, bootstrapping was run to provide the significance of these metrics.

4.8.2 Moderation Analysis using PLS-SEM

The two commonly used general approaches for moderation analysis using latent variables with PLS-SEM are the product term approach and the group comparison approach (Henseler & Fassott, 2010), both of which have been recognised to lead to comparable results (Fassott, Henseler, & Coelho, 2016). With regards to the product term approach, Henseler and Fassott (2010) present an equation that provides the basis by which moderation can be integrated into PLS-SEM, which is an adaption of multiple regression techniques using singular variables. With this solution, an interaction term is created, where each of the observed variables for the predictor construct/independent variable (X) are standardised and multiplied with the standardised observed variables for the moderating construct (M) (Henseler & Fassott, 2010). These newly created interaction items are then used to load onto the latent interaction effect construct (X.M) within the model, which also includes the latent constructs for the predictor variable, the outcome variable/dependent variable (Y) and the moderator variable as shown in
the figure 4.8.1 below. This method has been used in multiple academic studies including many within the marketing literature (Wilson, 2010).

Differently to the product term approach, the group comparison approach is commonly used when the moderating variable is a categorical variable, or can be made discreet, when the moderating effect is demonstrated through differences in the parameters of the same model that is run through different sets of data based on the categorical moderator variable, or a split continuous variable (Henseler & Fassott, 2010). This method allows researchers to view any differences that occur within the model for different categories or scores of the moderator variable to determine any moderating effects.

When comparing the two above approaches, while both techniques have been recognised to lead to the same results (Fassott et al., 2016), due to dichotomization, if the group comparison approach is used for a continuous latent variable then part of the moderating variable’s variance will be lost in the analysis process (Henseler & Fassott, 2010). As such, while the results of the product term approach are usually either equal or superior, it has been recommended that this is the approach that should generally be taken (Henseler & Fassott, 2010), which this research will apply to test the moderation effects predicted in the hypotheses in chapter 3.

There are four recognised methods by which this moderation analysis can be applied within PLS-SEM, which are the product indicator approach, a two-stage approach, a hybrid approach and an orthogonalizing approach (Henseler & Chin, 2010). When determining the most appropriate of these methodological approaches by which to determine a moderating effect within PLS-SEM, it is important to consider whether the latent constructs are reflective or formative (Henseler & Chin, 2010; Henseler & Fassott, 2010). The latent constructs being considered within this research are all reflective, and within this situation it is recommended that the product indicator approach is taken, where product terms are created to serve as
indicators for the interaction term within the model to determine a potential moderating effect (Henseler & Fassott, 2010). The model for the product indicator approach is presented in Figure 4.8.1 below and considers the loadings of the latent constructs for the predictor variable, the moderator variable (M), and the interaction effect (X.M) on the outcome variable (Y). This model was tested using the SmartPLS 3.0 program, to provide the loadings within the PLS-SEM models and their significance levels to determine to moderating effects, which is concluded by the significance of the loading ‘c’ within the below model.

Figure 4.8.1 - The Product Indicator Approach Model

To create the models to test the hypotheses using the above product indicator approach, this research will apply all the observed variables retained within the congeneric measurement models in section 4.7.1. The observed variables retained within these congeneric models loaded well and explained significant variance within their respective latent constructs and were found to be both reliable and valid. As such, these congeneric models provide the
appropriate observed variables by which to measure each latent construct within the PLS-SEM models in order to test the hypothesised relationships and moderating effects.

As the majority of the latent constructs within the research are unidimensional, their inclusion within the PLS-SEM models to develop the interaction term was a simple process. However, with EID and MID being multi-dimensional measurements, this created complexity in calculating the interaction term as the observed variables are spread over multiple dimensions, which in turn have their own loadings onto the higher order latent construct. As such, to simplify the measurement of the multidimensional EID and MID constructs, composites were calculated for each sub-dimension as outlined in section 4.6.2, and these composite scores were used as the observed variables for the EID and MID constructs within the PLS-SEM models, as the calculation of composites provides an effective method by which to reduce the variables to a more manageable size (Rowe, 2002).

The observed variables and composite scores were loaded onto their respective predictor (X), outcome (Y) and moderating (M) latent constructs within the SmartPLS 3.0 program as per the model in Figure 4.8.1 above. SmartPLS 3.0 then enabled a simple method to create the interaction term within the model (X.M), and selections were made so that the product indicator approach and standardised data was used in the automatic weighting mode for the creation of the interaction term. While this research considered multiple independent and dependent variables, the above method is limited to be performed as per the model in figure 4.8.1 with one independent and one dependent variable. As such, multiple models needed to be run in order to test all the hypotheses outlined in Chapter 3.

Once each model had been created, to calculate the path coefficients with their respective significance levels and t values the bootstrapping function was used with parallel processing,
no sign changes, basic bootstrapping, bias corrected and accelerated bootstrap, and 10,000 subsamples, as subsamples of 5,000 and over are recommended for final results.

Once the path coefficients (a, b, and c in Figure 4.8.1) had been provided with the PLS algorithm, these were entered into a Microsoft Excel spreadsheet with formulas entered that visually displayed any potential moderating effect within a graph. The pre-formatted Excel spreadsheet within the formulas entered for developing these graphs was downloaded at www.jeremydawson.com/slopes.htm

Finally, to provide a better idea of the specific conditional effects of the predictor variables on the outcome variables at different values of the moderator variables, multigroup analysis was done within SmartPLS. For this, the data was subject to a median split of the moderator variable within the SmartPLS program, except for the mortality salience variable as this was already dichotomous and as such the multigroup analysis was simply run between the test and control groups. Such median splits of the data are recognised as a commonly used and robust data analysis technique (Iacobucci, Posavac, Kardes, Schneider, & Popovich, 2015).

4.9 Conclusion

The preceding chapter outlined the method by which the quantitative data to address the research question was collected and the methods by which the data integrity was tested.

The quantitative data was collected via an online questionnaire that was distributed to a random sample of the Australian general population with the assistance of an online panel company. Prior to the discussion of the online survey, the quantitative measurement instruments were outlined with a discussion on the measurement of the identities within this research, which
were both operationalised as higher order multidimensional constructs, with all other constructs unidimensional.

Following cleansing of the collected data, the measurement constructs congeneric models for all of the latent constructs were tested for model fit. Following the removal of a number of items, all constructs were shown to have good convergent validity. Discriminant validity and reliability were then subsequently confirmed for the measurement constructs and the Harman’s single factor technique confirmed that there was no common method bias within the sample. Finally, a PLS-SEM approach was outlined as appropriate to address the research hypotheses.

The next chapter will apply the data collected with the final validated measurement models from this chapter and apply them within a process that will test relationships and moderation effects between the multidimensional identity constructs and the other variables of interest to address the research hypotheses outlined in Chapter 3.
Chapter 5: Quantitative Results

5.1 Introduction

This chapter will present the results from the quantitative data analysis using the data collected and measurement models outlined in the previous chapter. The PLS-SEM models and the resulting metrics from the moderation analyses run using the product indicator approach within SmartPLS 3.0 are presented along with graphical representations of the analysed data to address the research hypotheses presented in Chapter 3.

5.2 Hypothesis Testing

The purpose of this research is to investigate the coexistence of environmental identity (EID) and material identity (MID), how this coexistence is influenced by chronic regulatory focus and mortality salience, and how the coexistence impacts the subsequent guidance towards compulsive buying, status consumption, voluntary simplification and willingness to sacrifice to protect the environment (WTS). The PLS-SEM models and associated graphics presented within this section show the relevant relationships and moderating effects of the above constructs that this research seeks to understand.

Chapter 4 presented the congeneric measurement models with indicator loadings, construct reliability measure, average variance extracted (AVE) and highest squared correlation (HSC), demonstrating that the measurement models had acceptable convergent validity, discriminant validity and reliability. These confirmed measurement models are utilised within the PLS-SEM models presented below, which test the measurement models and structural models concurrently.
PLS-SEM enables the testing of moderation effects within a structural model (Henseler & Fassott, 2010). The reported statistics to address the research hypotheses examine the structural model and include the absolute values for the path coefficients, $R^2$, and $Q^2$. The path coefficients the effect of the predictor latent variables upon the outcome latent variables, with the subsequent p value (required to be below .05) and t statistics (required to be above 1.96) indicating the statistical significance of this effect. The $R^2$ was included as the coefficient for determination to measure the predictive accuracy of the model, with values ranging from 0 to 1 with higher values indicating greater prediction accuracy (Henseler et al., 2009). Finally, the $Q^2$ value (commented on for each model below with figures presented in Appendix 2) indicates the predictive relevance of the structural model, where values above 0 are indicative of predictive relevance within the model (Henseler et al., 2009).

5.2.1 The Relationship between EID and MID

H1 proposed that there would be a negative relationship between EID and MID, which was tested using the PLS Algorithm within SmartPLS 3.0. Figure 5.2.1 below shows the model that tests this relationship between the latent factors for EID and MID, where the observed variables all showed acceptable loadings onto their respective latent constructs, with the path coefficients and metrics for this model presented in Table 5.2.1, which shows both low $R^2$ of .019 and $Q^2$ of .090. Furthermore, the path coefficient of 0.137, with a p value of 0.445 and t statistic of .764 showed a non-significant relationship between the EID and MID latent constructs. As such, Figure 5.2.1 and Table 5.2.1 show that there is no relationship between EID and MID.
H1 predicted a negative relationship between EID and MID based on the inherent conflict between the underlying ideologies they present. However, from the above, there is no relationship observed between the two variables. As such, the results do not support H1.

This finding is unexpected, and suggests that the core underlying meanings and ideologies framed by these identities may not be in conflict with each other within consumers. Consideration should be given to the notion that a consumer may compartmentalise the different identities within the self to avoid potential conflict (Donahue et al., 1993). This would mean that they will largely try to separate the application of meanings by these identities where they subconsciously avoid applying the frame of meaning presented by both higher-level identity standards concurrently. However, further examination is required to determine if there are some consumers, or some contexts, where a hypothesised negative relationship does indeed exist between EID and MID.
As there was no significant relationship identified between EID and MID, deeper investigation of the data is presented below to determine whether the argued moderating factors (e.g. chronic regulatory focus and mortality salience) provide a context in which the perceived conflict (i.e. a negative relationship) can be identified. As such, the investigation of chronic promotion focus, chronic prevention focus and mortality salience are considered below.

5.2.2 The Impact of Promotion Focus on the Relationship between EID and MID

Table 5.2.2 and Figure 5.2.2 show the results from the PLS-SEM metrics and the model for the moderation analysis, testing the interaction effect of chronic promotion focus upon the relationship between EID and MID, with the $R^2$ of .218 and $Q^2$ of .130 (see Appendix 2), showing predictive accuracy and relevance. However, the effect of the interaction term upon the outcome variable (MID) is not statistically significant at -0.023, with a p value of .689 and a t statistic of 0.4. As such, this model indicates that there is no moderating effect of chronic promotion focus on the relationship between MID and EID. This is visually presented in Figure 5.2.3, which shows that the slope of the relationship between EID and MID does not change between those who score higher on the promotion focus scale when compared to those who scored lower on the promotion focus scale. As promotion focus had no impact upon the relationship between EID and MID, these results do not provide support for H2a.

<table>
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<th>Path Coefficients</th>
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<th>p Values</th>
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</thead>
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<td>1.027</td>
<td>0.304</td>
</tr>
<tr>
<td>EID x Promotion Focus -&gt; MID</td>
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<td>0.4</td>
<td>0.689</td>
</tr>
<tr>
<td>Promotion Focus -&gt; MID</td>
<td>0.481</td>
<td>8.57</td>
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</table>
Figure 5.2.2 - PLS-SEM for the Interaction Effect of Promotion Focus on EID -> MID

*All 10 indicators calculated by Smart PLS for the interaction term loaded acceptably onto the latent construct with loadings all over .7.

Figure 5.2.3 - PLS-SEM Graphic for the Interaction Effect of Promotion Focus on EID -> MID
5.2.3 The Impact of Prevention Focus on the Relationship between EID and MID

Table 5.2.3 and Figure 5.2.4 below show the results from the PLS-SEM metrics and the model for the moderation analysis, testing the interaction effect of chronic prevention focus upon the impact of EID upon MID, with the R² of .116 and Q² of .150 (see Appendix 2), showing predictive accuracy and relevance. The results show that the effect of the interaction term upon the outcome variable (MID) is -0.224, which is statistically significant with a p value of .001 and a t statistic of 3.237. As such, this model shows that a chronic prevention focus does influence the impact of EID upon MID, as there is a significant interaction effect of chronic prevention focus on the impact of EID upon MID, providing support for H2b.

*All 8 indicators calculated by SmartPLS for the interaction term loaded acceptably onto the latent construct with loadings all over .7.*
The interaction effect of chronic prevention focus upon the relationship between EID and MID is visually presented in Figure 5.2.5 below which shows that the slope of the relationship between EID and MID changes between those who score higher on the chronic prevention focus scale when compared to those who scored lower. For those within the high prevention focus group, it can be seen that MID decreases as EID increases and hence displays the originally hypothesised negative relationship (H1) between EID and MID. Differently, for those within the low prevention focus group, it can be seen that MID increases as EID increases, indicating a positive relationship.

Table 5.2.4 below shows the results of the conditional effect of EID on MID at low and high levels of chronic prevention focus based on a median split of the chronic prevention focus composite scores, and using the resulting 2 groups to perform a multigroup analysis upon the model measuring the relationship between the EID and MID latent constructs (Figure 5.2.1). It shows that within the high prevention focus group there is a path coefficient of -0.287, which is statistically significant with a p value of 0.004. Differently, within the low prevention focus group there is a positive path coefficient of 0.237, which is also statistically significant with a p value of 0.032. As such, these results show that based on a median split of the data around chronic prevention focus scores that the nature of the relationship changes from positive and negative based on the chronic prevention focus strength.

<table>
<thead>
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<th>Path Coefficients</th>
<th>t Statistics</th>
<th>p Values</th>
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<td>EID x Prevention Focus -&gt; MID</td>
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</tr>
<tr>
<td>Prevention Focus -&gt; MID</td>
<td>0.315</td>
<td>4.189</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The above results show that chronic prevention focus has an interaction effect where there is a difference in the nature of the relationship between EID and MID from positive to negative between the low and high prevention focus groups respectively. This finding suggests that with their more vigilant psychological state where they seek to avoid mismatches to their goals (Zhu & Meyers-Levy, 2007), and show greater accuracy in scanning for errors of commission (Förster et al., 2003), consumers with a chronic prevention focus are more likely to recognise
the conflict between the meanings and ideals framed by EID and MID, increasing the likelihood of them being unable to coexist within those consumers. With the statistically significant moderating effect and the high prevention focus group displaying a negative relationship between EID and MID, these results provide support for H2b.

5.2.4 The Impact of Mortality Salience on the Relationship between EID and MID

While there was a non-significant relationship between EID and MID, the impact of mortality salience is explored to determine if it is a condition that influences the nature of this relationship. Table 5.2.5 and Figure 5.2.6 below show the results from the PLS-SEM metrics and the model for the moderation analysis, testing the effect of mortality salience upon the relationship between EID and MID, with the $R^2$ of .076 and $Q^2$ of .080 (see Appendix 2) showing predictive accuracy and relevance. The results show that effect of the interaction term upon the outcome variable (MID) is 0.173, which is statistically significant with a p value of .047 and a t statistic of 1.991. As such, this model shows that there is a significant interaction effect of mortality salience on the relationship between MID and EID, suggesting support for H3.

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>t Statistics</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; MID</td>
<td>0.051</td>
<td>0.537</td>
</tr>
<tr>
<td>EID x Mortality Salience -&gt; MID</td>
<td>0.173</td>
<td>1.991</td>
</tr>
<tr>
<td>Mortality Salience -&gt; MID</td>
<td>0.189</td>
<td>2.727</td>
</tr>
</tbody>
</table>

Table 5.2.5 - PLS Metrics for the Interaction Effect Mortality Salience on EID -> MID
The interaction effect of mortality salience upon the relationship between EID and MID is visually presented in Figure 5.2.7 below which appears to show that the slope of the relationship between EID and MID differs between those who had mortality salience induced when compared to those who had the dentist control condition. For those within the mortality salience test group, MID appears to decrease as EID increases, while for those within the dentist control group, MID appears to increase with EID.
Table 5.2.6 below shows the results of the conditional effect of EID on MID within both the mortality salience and dentist control conditions by using these 2 groups to perform a multigroup analysis upon the model measuring the relationship between the EID and MID latent constructs (Figure 5.2.1). It shows that within the mortality salience test group there is a path coefficient of -0.229, however this is statistically insignificant with a p value of 0.091. Differently, within the dentist control group there is a positive path coefficient of 0.221, which is statistically significant with a p value of 0.046. As such, these results show that while there is a positive relationship between EID and MID within the control group, there is no relationship within the mortality salience test group. Thus, while mortality salience does appear to impact the relationship between EID and MID based on the differences between the results of the test and control group, because there is no statistical significance within the
relationship displayed in the mortality salience test group, the nature of this change is less certain, and as such the data does not provide sufficient support for H3.

Table 5.2.6 - Conditional Effect of EID on MID based on induced Mortality Salience

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Path Coefficient</th>
<th>t Statistic</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality Salience</td>
<td>-0.229</td>
<td>1.692</td>
<td>0.091</td>
</tr>
<tr>
<td>Dentist Control</td>
<td>0.221</td>
<td>1.994</td>
<td>0.046</td>
</tr>
</tbody>
</table>

As the split of the data displayed in Figure 5.2.7 and Table 5.2.6 above shows that there is a significant positive relationship between EID and MID (among those respondents that did not have experimentally induced mortality salience), and as with the results of the analysis around chronic prevention focus in section 5.2.3, this further helps to explain why there was no observed negative relationship within the sample as a whole, as was predicted in H1, and also shows that a positive relationship between EID and MID could be considered to be quite common within the population.

5.2.5 The Direct Influence of MID on the Outcome Variables

H4 predicted a positive relationship between MID and status consumption. Figure 5.2.8 and Table 5.2.7 show the PLS-SEM model and metrics for testing the relationship between MID and status consumption. The model shows a positive relationship between MID and status consumption with a path coefficient of .598, an R² of .358 and Q² of .268, showing predictive accuracy and relevance. This positive relationship was also seen as statistically significant with a p value of .000 and a t statistic of 14.669. As such, the data shows a positive relationship between MID and status consumption and H4 is supported.
Table 5.2.7 - Metrics for PLS Algorithm between MID and Status Consumption

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>Q²</th>
<th>t Statistic</th>
<th>p Value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID -&gt; Status Consumption</td>
<td>0.598</td>
<td>0.268</td>
<td>14.669</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Figure 5.2.8 - PLS-SEM Model for the MID -> Status Consumption

H5 predicted a positive relationship between MID and compulsive buying. Figure 5.2.9 and Table 5.2.8 show the PLS-SEM model and the metrics for testing the relationship between MID and compulsive buying. The model shows a positive relationship between MID and compulsive buying with a path coefficient of .575, an R² of .330, and Q² of .196 showing predictive accuracy and relevance. This positive relationship was also seen as statistically significant with a p value of .000 and a t statistic of 11.504. As such, the data shows a positive relationship between MID and compulsive buying and H5 is supported.

Table 5.2.8 - Metrics for PLS Algorithm between MID and Compulsive Buying

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>Q²</th>
<th>t Statistic</th>
<th>p Value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID -&gt; Compulsive Buying</td>
<td>0.575</td>
<td>0.196</td>
<td>11.504</td>
<td>0.000</td>
</tr>
</tbody>
</table>
5.2.6 The Direct Influence of EID on the Outcome Variables

H7 predicted a positive relationship between EID and WTS. Figure 5.2.10 and Table 5.2.9 show the PLS-SEM model and the bootstrap metrics for testing the relationship between EID and willingness to sacrifice to protect the environment respectively. The model shows a positive relationship between EID and WTS with a path coefficient of .669, an $R^2$ of .448, and $Q^2$ of .353, showing predictive accuracy and relevance. This positive relationship was also seen as statistically significant with a p value of .000 and a t statistic of 17.568. As such, the data shows a positive relationship between EID and WTS and H6 is supported.

<table>
<thead>
<tr>
<th></th>
<th>Path Coefficient</th>
<th>$Q^2$</th>
<th>t Statistic</th>
<th>p Value</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; WTS</td>
<td>0.669</td>
<td>0.353</td>
<td>17.568</td>
<td>0.000</td>
<td>0.448</td>
</tr>
</tbody>
</table>
H6 predicted a positive relationship between EID and voluntary simplification. Figure 5.2.11 and Table 5.2.10 show the PLS-SEM model and the bootstrap metrics for testing the relationship between EID and voluntary simplification. The model shows a positive relationship between EID and voluntary simplification with a path coefficient of .267 an $R^2$ of .071, and $Q^2$ of .045, showing predictive accuracy and relevance. This positive relationship was also seen as statistically significant with a $p$ value of .000 and a $t$ statistic of 4.638. As such, the data shows a positive relationship and H7 is supported.

Table 5.2.10 - Metrics for PLS Algorithm between EID and Voluntary Simplification

<table>
<thead>
<tr>
<th></th>
<th>Path Coefficient</th>
<th>$Q^2$</th>
<th>$t$ Statistic</th>
<th>$p$ Value</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; Voluntary Simplification</td>
<td>0.267</td>
<td>0.045</td>
<td>4.638</td>
<td>0.000</td>
<td>0.071</td>
</tr>
</tbody>
</table>
5.2.7 The Moderating Effect of MID upon the Guidance of EID

H8a proposed that there would be a negative moderating effect of MID upon the relationship between EID and voluntary simplification. Table 5.2.11 and Figure 5.2.12 below show the PLS-SEM results for the moderation analysis, testing the interaction effect of MID upon the relationship between EID and voluntary simplification, with the $R^2$ of .184 and $Q^2$ of .119 (see Appendix 2), showing predictive accuracy and relevance. The results show that effect of the interaction term upon the outcome variable (voluntary simplification) is -0.101, which is not statistically significant with a $p$ value of .140 and a $t$ Statistic of 1.447. As such, this model shows that there is not a statistically significant moderating effect of EID on the relationship between MID and Status Consumption. As such, the results do provide support for H9a.

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>t Statistics</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; Voluntary Simplification</td>
<td>0.238</td>
<td>3.659</td>
</tr>
<tr>
<td>MID -&gt; Voluntary Simplification</td>
<td>-0.297</td>
<td>4.489</td>
</tr>
<tr>
<td>EID x MID -&gt; Voluntary Simplification</td>
<td>-0.101</td>
<td>1.447</td>
</tr>
</tbody>
</table>
H8b proposed that there would be a negative moderating effect of MID upon the relationship between EID and WTS. Table 5.2.12 and Figure 5.2.13 below show the results from the moderation analysis testing the interaction effect of MID upon the relationship between EID and WTS, with the R^2 of .485 and a Q^2 of .456, showing predictive accuracy and relevance. The results show that effect of the interaction term upon the outcome variable (WTS) has an effect of -.134, which is statistically significant with a p value of .003 and a t statistic of 2.992. As such, this model suggests that there is a moderating effect of MID on the relationship between EID and WTS.
Table 5.2.12 - Metrics for PLS Algorithm for the Interaction Effect MID on EID -> WTS

<table>
<thead>
<tr>
<th></th>
<th>Path Coefficient</th>
<th>t Statistics</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; WTS</td>
<td>0.644</td>
<td>15.11</td>
<td>0.000</td>
</tr>
<tr>
<td>MID -&gt; WTS</td>
<td>-0.081</td>
<td>1.322</td>
<td>0.186</td>
</tr>
<tr>
<td>EID x MID -&gt; WTS</td>
<td>-0.134</td>
<td>2.992</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Figure 5.2.13 - PLS-SEM for the Interaction Effect of MID on EID -> WTS

The moderating effect of MID upon the relationship between EID and WTS is visually presented in Figure 5.2.14 below which shows that the slope of the relationship between EID and WTS changes based on the strength of MID. For the group consisting of those with a weaker MID, it can be seen that the slope is steeper than within the group of those with a strong
MID, indicating a MID negatively moderates/weakens the positive relationship between EID and WTS. Furthermore, as the metrics above show, this moderation effect is statistically significant. As such, there is a negative moderating effect of MID upon the positive relationship between EID and WTS, which can be confirmed as statistically significant. Therefore, H9b is supported.

Figure 5.2.14 - PLS-SEM Graphic for the Interaction Effect of MID on EID -> WTS

5.2.8 The Moderating Effect of EID upon the Guidance of MID

H9a proposed that there would be no moderating effect of EID upon the relationship between MID and compulsive buying. Table 5.2.13 and Figure 5.2.15 below show the PLS-SEM results for the moderation analysis, testing the interaction effect of EID upon the relationship between MID and compulsive buying, with the R² of .364 and Q² of .251 (see Appendix 2), showing
predictive accuracy and relevance. The results show that effect of the interaction term upon the outcome variable (compulsive buying) is weak at 0.114, which is also statistically insignificant with a p value of .406 and a t Statistic of .831. As such, this model suggests that there is no moderating effect of EID on the relationship between MID and Compulsive Buying, as was proposed in P1 and hypothesised in H9a.

Figure 5.2.15 - PLS-SEM for the Interaction Effect of EID on MID → Compulsive Buying

![PLS-SEM diagram]

Table 5.2.13 - PLS Metrics for the Interaction Effect EID on MID → Compulsive Buying

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient</th>
<th>t Statistics</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID → Compulsive Buying</td>
<td>0.199</td>
<td>3.31</td>
<td>0.001</td>
</tr>
<tr>
<td>MID → Compulsive Buying</td>
<td>0.544</td>
<td>10.013</td>
<td>0</td>
</tr>
<tr>
<td>EID x MID → Compulsive Buying</td>
<td>0.114</td>
<td>0.831</td>
<td>0.406</td>
</tr>
</tbody>
</table>
Figure 5.2.16 above provides a visual representation of the tested moderating effect of EID upon the relationship between MID and compulsive buying. It shows that there is a positive relationship between MID and compulsive buying for both groups that scored high and low on EID. It also shows no major difference between the slopes of the high EID group and the low EID group. H9a was based on an inability for EID to negatively moderate/weaken the positive relationship between MID and compulsive buying. Combining this visual representation with the insignificant interaction effect within Table 5.2.13 and Figure 5.2.15, the results provide strong evidence that EID does not negatively moderate relationship between MID and compulsive buying. As such, H9a is supported.

H9b proposed that there would be no moderating effect of EID upon the relationship between MID and status consumption. Table 5.2.14 and Figure 5.2.17 below show the PLS-SEM results for the moderation analysis, testing the interaction effect of EID upon the relationship between MID and status consumption, with the $R^2$ of .376 and $Q^2$ of .211, showing predictive accuracy and relevance. The results show that effect of the interaction term upon the outcome variable
(status consumption) is 0.085 and not significant with a p value of .251 and a t Statistic of 1.147. As such, this model shows that there is no moderating effect of EID on the relationship between MID and status consumption, as was hypothesised in H9b.

Table 5.2.14 - PLS Metrics for the Interaction Effect EID on MID -> Status Consumption

<table>
<thead>
<tr>
<th></th>
<th>Path Coefficient</th>
<th>t Statistics</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; Status Consumption</td>
<td>0.107</td>
<td>1.042</td>
<td>0.298</td>
</tr>
<tr>
<td>MID -&gt; Status Consumption</td>
<td>0.569</td>
<td>12.269</td>
<td>0.000</td>
</tr>
<tr>
<td>EID x MID -&gt; Status Consumption</td>
<td>0.085</td>
<td>1.147</td>
<td>0.251</td>
</tr>
</tbody>
</table>

Figure 5.2.17 - PLS-SEM for the Interaction Effect of EID on MID -> Status Consumption
Figure 5.2.18 above provides a visual representation of the tested moderating effect of EID upon the relationship between MID and status consumption. It shows that there is a positive relationship between MID and status consumption for both groups that scored high and low on EID. While, it also shows no major difference between the slopes of the high EID group and the low EID group, if anything there is a slightly steeper slope within the high EID group. As H9b was based on an inability for EID to negatively moderate/weaken the positive relationship between MID and compulsive buying, combining these results in Figure 5.2.18 with the insignificant interaction effect within Table 5.2.14 and Figure 5.2.17, the results provide strong evidence that EID does not negatively moderate relationship between MID and status consumption. As such, H9b is supported.

Combining the support of both H9a and H9b, P1 is subsequently confirmed.
5.3 Summary of Hypothesis Testing

Table 5.3.1 below shows the summary of the hypotheses within this research and whether they were supported or not supported by the collected data. The table shows that the majority of the hypotheses (H2b, H4, H5, H6, H7, H8b, H9a, and H9b) were supported by the data, however H1, H2a, H3 and H8a were not supported by the data. Furthermore, as both H9a and H9b were supported, this also confirmed P1.

Table 5.3.1 - Summary of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hyp.</th>
<th>Predictor</th>
<th>Outcome</th>
<th>Moderator (direction)</th>
<th>Moderation significance</th>
<th>Effect</th>
<th>Effect Significance</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>EID</td>
<td>MID</td>
<td>N/A</td>
<td>N/A</td>
<td>.137</td>
<td>.445</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2a</td>
<td>EID</td>
<td>MID</td>
<td>Promotion Focus</td>
<td>.689</td>
<td>-.150</td>
<td>.304</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2b</td>
<td>EID</td>
<td>MID</td>
<td>Prevention Focus</td>
<td>.001</td>
<td>-.057</td>
<td>.584</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>EID</td>
<td>MID</td>
<td>Mort Salience</td>
<td>.047</td>
<td>.051</td>
<td>.537</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H4</td>
<td>MID</td>
<td>CB</td>
<td>N/A</td>
<td>N/A</td>
<td>.598</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>MID</td>
<td>SC</td>
<td>N/A</td>
<td>N/A</td>
<td>.575</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>EID</td>
<td>WTS</td>
<td>N/A</td>
<td>N/A</td>
<td>.669</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>EID</td>
<td>VS</td>
<td>N/A</td>
<td>N/A</td>
<td>.267</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H8a</td>
<td>EID</td>
<td>VS</td>
<td>MID</td>
<td>.150</td>
<td>.238</td>
<td>.000</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H8b</td>
<td>EID</td>
<td>WTS</td>
<td>MID</td>
<td>.003</td>
<td>.644</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H9a</td>
<td>MID</td>
<td>CB</td>
<td>EID</td>
<td>.406</td>
<td>.544</td>
<td>.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H9b</td>
<td>MID</td>
<td>SC</td>
<td>EID</td>
<td>.251</td>
<td>.569</td>
<td>.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

5.3.1 Findings on the Relationship between EID and MID

H1 predicted that there would be a negative impact of EID upon MID based on the incompatibility of environmental and materialistic ideals, however the findings do not provide support for a relationship between EID and MID. As such, H1 was not supported by the data. As there was no relationship between the two constructs within the sample as a whole,
consideration was given to examine whether sub-groups within the data exhibit this relationship.

H2a predicted that there would be a negative moderating effect of chronic promotion focus on the relationship between EID and MID, however, the PLS-SEM moderation analysis results showed there was no moderating effect of chronic prevention focus on the relationship between EID and MID. As such, H2a was rejected and it was confirmed that chronic promotion focus had no moderating effect on the relationship between EID and MID.

H2b predicted that chronic prevention focus would moderate the relationship between EID and MID such that the higher scores of chronic prevention focus, the more negative the impact of EID upon MID would become. The PLS-SEM moderation analysis results showed that a negative relationship between EID and MID existed when chronic promotion focus was high and that this was a statistically significant moderating effect providing support for H2b. However, the analysis results also showed that when chronic prevention focus is low, a positive relationship between EID and MID can be identified, where both path coefficients were statistically significant. As such, chronic prevention focus had a moderation effect where there is a difference in the nature of the relationship between EID and MID for high and low scores of prevention focus. As this moderating effect was in the direction hypothesised, the results provided support for H2b.

H3 predicted that mortality salience would moderate the relationship between EID and MID such that within the mortality salience group, the negative the impact of EID upon MID would be greater than within the dentist control group, and hence the likelihood of coexistence of opposing identities would be less among respondents with experimentally induced mortality salience. The PLS-SEM moderation analysis results showed that there was a statistically significant interaction effect of mortality salience upon the relationship between EID and MID.
However, while there was a positive relationship between EID and MID within the dentist control group, within the mortality salience test group there was not a statistically significant relationship between EID and MID. As such, while mortality salience did reduce the predictability of the relationship between EID and MID, where a positive relationship was observed in its absence, these results were not entirely consistent with what was hypothesised.

5.3.2 Findings on the Guidance of EID and MID

The findings relating to the investigation of the direct relationships confirmed all the hypothesis relating to how MID will guide and individual towards compulsive buying and status consumption and also how EID would guide an individual towards voluntary simplification and WTS. As such, it can be concluded that these identities provide guidance towards these associated behaviours, with support provided for all of H4, H5, H6 and H7.

While the above findings relating to the guidance of each identity may have been largely intuitive, with confirmation that MID and EID do guide individuals towards these predicted behavioural intentions, this enabled further testing of whether each identity had the ability to interrupt their expected guidance by testing their possible moderating effect on these relationships.

5.3.3 Findings on the ability of EID and MID to Interrupt one another

H8a and H8b predicted that MID would weaken an EID’s ability to guide the self towards Voluntary Simplification and WTS respectively. The PLS-SEM results testing for a moderation effect of MID on the relationship between EID and Voluntary Simplification showed that the ability of MID to weaken the relationship was statistically insignificant. The PLS-SEM results also showed that there was a statistically significant weakening in the positive
relationship between EID and WTS caused by MID. From these results, H8b was supported while H8a was not.

H8a and H8b were based on the idea that a MID would weaken the ability of an EID to guide the self toward environmentally friendly intentions, if those intentions involve sacrifice of a more material lifestyle. As EID was shown to have a positive relationship with both Voluntary Simplification and WTS, this enabled testing of whether MID could weaken these relationships. While there was no statistically significant moderating effect of MID on EID’s relationship with Voluntary Simplification, the relationship between EID and WTS was strong, and the PLS-SEM results showed that MID did have a statistically significant negative moderating effect to weaken this relationship as was predicted in H8b. As such, the results did illustrate that when there is conflict between MID and EID, that the MID does weaken the ability of the EID to guide the self towards pro-environmental intentions.

P1 predicted that a MID would not be able to interrupt the guidance of MID towards consumerist intentions. By extension and to test this, H9a and H9b both predicted that EID would not have the ability to influence MID’s ability to guide the self towards compulsive buying and status consumption respectively. The PLS-SEM results for a moderation effect of EID on the relationship between MID and compulsive buying showed that the interaction effect of EID on the relationship was statistically insignificant. Similarly, The PLS-SEM results showed that EID had no significant impact upon the relationship between MID and status consumption. Therefore, as the data showed no moderating effect of EID in both these scenarios, both H9a and H9b were supported. By extension, P1 was confirmed that an EID cannot interrupt the ability of a MID to guide consumerist intentions.
5.4 Conclusion

The preceding chapter presented the PLS-SEM results that showed that there did not appear to be a significant relationship between EID and MID among the sample surveyed, but that further investigation of chronic prevention focus and morality salience showed that there were segments within the sample where both positive and negative relationships between EID and MID could be observed. Furthermore, it was shown that while EID did not have the ability to moderate the guidance of a MID, a MID does have the ability to moderate the guidance of an EID. The next chapter will discuss these results with an outline of how they contribute to consumer research as well as their practical implications, the limitations of the research and avenues they open for future research.
Chapter 6: Discussion

6.1 Introduction

Consumer research has considered the construct of identity and how this influences the direction of an individual’s consumer behaviours (Arnould & Thompson, 2005). More recently, the consideration of identity in consumer research has looked at how identity related concepts such as identity threat, identity consistency and identity conflict also have an impact upon various avenues of consumption behaviours (Ahuvia, 2005; Chugani et al., 2015; Holt & Thompson, 2004; Ward & Broniarczyk, 2011). While people have multiple and often conflicting identities that guide the self (Ahuvia, 2005; Stryker & Burke, 2000), the notion of two specific conflicting identities within the self and how this influences the guidance of consumer decisions has not been explicitly considered within consumer research until now. This research answers the research problem of whether consumers have the ability to hold two ideologically conflicting higher-level identity standards within the self and how would this influence broader avenues of consumption and environmental behaviour. Furthermore, this research provides an understanding of how such conflicting higher-level identity standards coexist by looking at how chronic regulatory focus orientations and mortality salience impact the relationship between EID and MID, and clarifies how their coexistence influences the guidance of pro-environmental and profligate consumerist avenues of behaviour.

Taking into account existing findings and theorising from marketing and psychology literature, hypotheses were developed that considered the nature of the relationship between EID and MID and then further, how these higher-level identity standards moderated the ability of one another to influence pro-environmental and profligate consumerist intentions. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to determine the existence and significance of the hypothesised relationships. While many of the hypothesised effects were
confirmed, there were also some interesting and unexpected results within the data. Consequently, this research provided two primary contributions to begin to better advance knowledge of the coexistence of conflicting identities and the resulting outcomes within the context of consumer research.

The first contribution this research provides is a better understanding of the coexistence of ideologically conflicting identities. The findings showed that ideologically conflicting identities can coexist and illustrated conditions under which there were positive and negative relationships between EID and MID. The results showed that prevention focus moderated the relationship between EID and MID, and there was a negative relationship for those with a higher chronic prevention focus and a positive relationship for those with a lower prevention focus. The results also showed that there was a positive relationship between EID and MID within the dentist control group, and no relationship within the morality salience test group.

The second contribution is the provision of a better understanding on the ability of ideologically conflicting identities to interrupt the guidance of one another. That is, it showed that MID negatively moderates the guidance of EID towards pro-environmental intentions, but that EID does not negatively moderate the guidance of MID towards profligate consumerist intentions. As such, it was shown that when there are ideologically conflicting identities, one identity standard can be dominant, where it interrupts the guidance of the other identity but does not have its own guidance interrupted by that other identity.

This chapter will discuss these contributions in more detail with theoretical reasoning for the unexplained results. This will be followed with some practical implications for commercial and social marketers, and policy directions for any social entities based on the findings presented within this research. Finally, this chapter will discuss current limitations of the findings and relate these to potential directions for further research.
6.2 Theoretical Contributions

Research in identity theory has provided a good foundational understanding into how individuals develop identities within the self that guide them in situations throughout life (Stets & Burke, 2000; Stryker & Burke, 2000). Marketing and consumer literature has further advanced this theory with consideration of how these identities guide behaviours within and in response to the consumer marketplace (Arnould & Thompson, 2005; Escalas, 2013). This research has provided a good understanding of how consumer identities are able to guide the self towards avenues of behaviour that share meaning with these self-important identities. However, until now it has not been clear how two different ideologically conflicting higher-level identity standards can coexist within consumers and how this can influence the guidance of those identities upon an individual’s consumption behaviour.

This thesis provides a further contribution to this area of research by investigating the coexistence of the ideologically conflicting higher-level identity standards of EID and MID within consumers. As such, it enhances understanding of how two separate and theoretically conflicting identities coexist within the self and how this coexistence can influence intentions relevant to avenues of pro-environmental and consumerist behaviours.

6.2.1 The Coexistence of Ideologically Conflicting Identities

The findings of this research highlighted the nature of the relationship between EID and MID, and found that it is not unlikely for both ideologically conflicting higher-level identity standards to coexist within the same consumer. Thus, it extended understanding of identity theory and consumer research by showing that while there is theoretical and ideological conflict between many of the environmental and consumerist meanings presented by EID and MID based on the recognised conflict that can occur between materialism and environmentalism
(Banerjee & McKeage, 1994; Good, 2007; Kilbourne & Pickett, 2008), this does not mean the two identities cannot coexist within the self. That is, the non-significant relationship from the results testing H1 showed that EID and MID do not appear to impact one another’s existence within the self. Furthermore, the statistically significant positive relationships that were shown within both the control condition and among those with a low prevention focus showed that there were consumers where the presence of one higher-level identity standard is more likely associated with the presence of the other higher-level identity standard. Hence, this research suggests that these higher-level identity standards can coexist within the self, despite the recognised ideological conflict between them.

Previous research has recognised that within society there is an array of conflicting cultural ideals that will influence a consumer’s behaviour (Thompson, 1996). EID and MID were chosen for the context of this research as they related to social forces within Western society that will encourage a caring for and protection of nature (Franzen & Meyer, 2010), as well as forces that encourage consumers to pursue happiness and success through acquisition of material resources (Dittmar, 2011). That is, EID and MID represent higher-level identity standards that reflect common ideologies and expectations within modern Western society. It has previously been recognised that when there are two conflicting cultural standards within society, that this can be reflected in the identities of consumers within that society (Holt & Thompson, 2004). That is, people exposed to these conflicting meanings can internalise them as conflicting identities. Thus, the positive relationship that was observed between EID and MID within some groups in the data can begin to be explained by cultural forces that encourage the development of both these higher-level identity standards. That is, this positive relationship will relate to consumers’ exposure to and internalisation of these common ideologies presented within society, where the strength of both identities within the self will be partially dependent upon the consumer’s exposure to cultural institutions that encourage the ideologies of both,
where the variance in such exposure subsequently leads to a positive relationship. However, while this explains how both EID and MID can be simultaneously constructed within consumers, as people are noted to seek consistency within their self-concept (Suh, 2002), it does not explain how these conflicting identities are able to continue to coexist without correction (i.e. reduced salience of one of the identities in response to the other).

It is argued that when multiple identities exist within the self, there can be high self-concept differentiation, where these identities present in a more fragmented state with a lack of integration within the core self (Donahue et al., 1993). For example, gay Christians have been noted to compartmentalise their sexual and religious identities separately within the self as a means to avoid perception of conflict enabling them to maintain both identities (Levy & Reeves, 2011). As such, one means by which EID and MID are able to coexist will relate to them being separated from each other within the self. That is, although both identities are internalised, this will be in a non-integrated manner allowing their conflicting meanings and ideology to remain separated. With their separation, the conflict between the ideologies of EID and MID will not be recognised. Consequently, neither identity should have the ability to influence the other’s presence within the self. Thus, such high self-concept differentiation will enable EID and MID to coexist within the self in a fragmented or compartmentalised manner.

While identities can be separated within the self, there will also be times when consumers will need to face the conflicting meanings they present, and in such cases consumers can deal with the conflict between different identities by selecting the areas of meanings they apply from these identities to guide the self (Ahuvia, 2005). As higher-level identity standards, EID and MID will frame broader meanings that provide the agency for a wide range of specific behaviours (Tsushima & Burke, 1999), and thus provide the self with a selection of more specific meanings to avoid the perception of conflict. Here, it is recognised that consumers will compromise, demarcate and synthesise the meanings presented by conflicting identities.
(Ahuvia, 2005). For example, some people engage in demarcated green consumerism, where they perform simpler environmental tasks such as recycling, but not to a level that significantly disrupts their consumerist pursuits (Autio et al., 2009). In this case, the self will selectively apply the agency of the EID to guide specific activities that do not disrupt the pursuits guided by the agency of the MID, once again enabling the avoidance of the perception of conflict to better enable EID and MID to coexist within the self.

When there are two conflicting identities that reflect different cultural norms and standards presented within society, consumers can avoid the perception of conflict through a third identity that helps to overcome the conflicting avenues of expectation (Holt & Thompson, 2004). As such, another method by which consumers could avoid conflict between coexisting EID and MID will be to apply a third identity that can successfully accommodate the demands of both. For example, ‘green consumers’ seek products that are seen to be environmentally friendly, and will compromise upon and synthesise the meanings framed by both EID and MID within a specific avenue of consumption behaviour. Hence, such application of a third identity may similarly enable the coexistence of EID and MID through demarcation, compromise and synthesis to enable the satisfaction of their expectations and avoidance of their conflict.

From the preceding paragraphs, consumers will internalise both EID and MID as a result of cultural forces that encourage their development within society. Despite the conflicting ideologies they frame, these identities can then coexist within the same self through a combination of compartmentalisation and the self selectively applying the broader agency of EID and MID through demarcation, compromise and synthesis as a means to avoid the perception of conflict and enable coexistence. As such, this research has shown that there is a common likelihood of coexistence between EID and MID, where the positive relationships seen in groups in the data are explained by external cultural forces internalising these higher-
level identity standards, and subsequent compartmentalisation and selective application of their meanings by individuals in order to avoid the perception of conflict between them.

6.2.2 Influencing Factors upon the Coexistence of Ideologically Conflicting Identities

Considering the results for the mortality salience manipulation, while there was a significant positive relationship within the control group and the PLS-SEM model suggested a statistically significant moderating effect of mortality salience upon the relationship between EID and MID, the statistically insignificant relationship within the test group showed that when mortality salience is induced the relationship between EID and MID is less clear. As such, while H3 could not be supported, within the mortality salience test group the positive relationship was not seen. While it cannot be properly defined, this does suggest mortality salience effects the interaction between EID and MID as the positive relationship between them is not seen when mortality salience is induced. That is, this research does provide evidence that mortality salience can have an influence on the coexistence between EID and MID within the self, as was hypothesised. However, as it could not be confirmed that it enables a negative relationship between EID and MID, H3 could not be supported.

There is, however, some preliminary evidence that certain segments of the population may experience conflict between EID and MID. That is, this research also found that consumers with a chronic prevention focus demonstrated a negative relationship between EID and MID. As such, it was shown that people will be less likely to have coexistence between these theoretically conflicting higher-level identity standards when they have a chronic prevention focus. As the likelihood that these identities will be mutually exclusive is greater for those with a chronic prevention focus, this contributes to identity theory by showing an avenue which enables a more consistent self-concept, where in the process of identity development
consumers will be less likely to internalise two conflicting higher-level identity standards. As chronic prevention focus relates to a long-term enduring prevention focus state (Higgins, 2000; Johnson & Yang, 2010), the effect it has upon the relationship between EID and MID would relate to the development of these identities over time. As such, these findings contribute to identity theory by providing evidence that in the process of identity development a chronic prevention focus will reduce the likelihood that ideologically conflicting higher-level identity standards will internalise together within consumers that possess such a chronic prevention focus. By extension, this also contributes to regulatory focus theory by providing evidence of how chronic prevention focus influences the development of identity.

While they are higher-level identity standards, which present broader levels of abstract meaning and values to the self (Tsushima & Burke, 1999), the conflict between EID and MID will need to occur at a lower more concrete level of abstraction. For example, “I care about nature” and “I like to own nice things” are abstract statements, which do not have an immediate and evident conflict. However, “We need to reduce pollution” and “I like to drive fast cars” are more concrete statements, which relate to the agency of EID and MID respectively, where there is a recognisable conflict between them. As a prevention focus will ensure someone vigilantly scans for mismatches and spends more time focusing on details to avoid errors (Förster et al., 2003; Zhu & Meyers-Levy, 2007), the negative relationship between EID and MID for consumers with a chronic prevention focus suggests that these people are more likely to identify the concrete areas for conflict that exist between the meanings presented by an EID and MID. Following the recognition of this conflict, the self would need to disassociate from the perceived importance in the meaning of one of these identities in order to maintain their ought selves, which is the motivation of a prevention focus (Higgins, 1997). As such, it is this vigilant screening and recognition of the concrete areas of conflict where a chronic prevention focus will affect the relationship between EID and MID.
While it was hypothesised that a chronic promotion focus would better enable the coexistence between EID and MID based on consumers with a promotion focus making more errors of commission (Crowe & Higgins, 1997), the results showed that a chronic promotion focus had no impact upon the relationship between EID and MID. Potential reasoning for there being no observed effect of promotion focus, is that it was hypothesised to have an effect upon an existing negative relationship (i.e. between EID and MID). However, it was shown within the data that EID and MID were not unlikely to coexist within the self, and there was no existing negative relationship upon which promotion focus could have a moderating effect. As such, the hypothesised errors of commission already appeared to be occurring within the population and consequently, this may have masked any potential effects of a chronic promotion focus.

Considering the above, the findings of this research show that the ability of higher-level identity standards that present areas for conflict to coexist can have significant variance among consumers in society. A chronic prevention focus will reduce this variance, making it more likely that these higher-level identity standards will develop a mutually exclusive self-importance. Consequently, this research shows that there is no direct barrier for identities that present broader conflicting meaning to coexist within the same self.

While these above findings were specific to the context of EID and MID, they contribute to identity theory and its application within broader consumer research by opening a new avenue for a better understanding of how identities that present conflicting ideology can coexist within the same self. Furthermore, this research also begins to open an avenue of understanding towards both external influencers (in this case mortality salience) and internalised dispositions (chronic prevention focus and promotion focus) upon this coexistence of conflicting identities. While this investigation only considered these two specific higher-level identity standards, it provides theoretical insight into the notion of how conflicting identities can coexist within consumers and the factors that influence this.
6.2.3 The Impact of Coexistence of Conflicting Identities on the Guidance of the Self

With regards to identity conflict, little research has been conducted that investigates how two ideologically conflicting identity standards that coexist within the same self, operate in conjunction to influence the guidance of the self towards consumer behaviours relevant to those identities. To help provide a better understanding of what occurs in this situation, this research sought to find how MID and EID affect one another’s ability to influence intentions towards compulsive buying, status consumption, voluntary simplification and willingness to sacrifice to protect the environment (WTS). As the following section discusses, results showed a difference in the ability of each identity to interrupt the other’s guidance, which can be explained by the intrinsic orientation of the EID and the extrinsic orientation of the MID.

This research demonstrated that the guidance of an identity towards avenues of behaviour with shared meaning is not just dependent upon the strength of that identity, but also the presence of other identities and the avenues of behaviour they guide. It was shown that while an identity can interrupt the guidance of another when there is conflict, this interruption will not always occur with each identity. Specifically, while a MID was identified to weaken the ability of an EID to guide pro-environmental intentions, an EID did not have the same ability to weaken the guidance of a MID toward consumerist intentions. As such, with regards to the outcome variables considered, MID and EID were shown to have different abilities to interrupt the guidance of one another, which shows the outcomes of the coexistence of such identities can be variable and dependent upon the identities that are presenting the conflicting meaning.

The reasoning for these results can be explained using the concept of self-determination theory. As materialistic values and pursuits are oriented towards and driven by extrinsic motivations (Dittmar, 2011; Hudders & Pandelaere, 2012; Kasser, 2003; Kasser & Ryan, 1993; Kasser et al., 2004), a MID is an extrinsically oriented identity and will optimally guide an extrinsically
motivated individual. Differently, environmental values and behaviours are best aligned with intrinsic satisfaction (Brown & Kasser, 2005; De Young, 1996; Kasser, 2009; Rich, Hanna, & Wright, 2017), and it has been shown that intrinsic motivation is better able to drive pro-environmental behaviours (Pelletier et al., 1998). As such, an EID is an intrinsically oriented identity that will optimally guide an intrinsically motivated self. As internalised expectations that drive opposing behavioural paths will result in self-threat (Holt & Thompson, 2004), which orients the self to be extrinsically motivated (Sheldon & Kasser, 2008), conflict between EID and MID will result in the self being oriented towards extrinsic motivation. Thus, the conflict between EID and MID will create a psychological orientation where the MID’s ability to guide consumerist pursuits will be optimised, and the EID’s ability to guide pro-environmental behaviours will be weakened. Therefore, when they both frame opposing paths to the self, MID is dominant over EID.

As there have been previous suggestions that self-determination theory plays an important role in the development of identities with regards to their congruence with the self (Soenens & Vansteenkiste, 2011), this research further develops this connection between self-determination theory and identity theory by identifying that the extrinsically oriented MID is dominant over intrinsically oriented EID. As such, this research utilises self-determination theory in conjunction with identity theory to better understand the outcomes of coexisting identities that can present conflict to the self. As previous theorising has argued intrinsic identities are better aligned within a congruent self (Soenens & Vansteenkiste, 2011), this research furthers this notion by showing that extrinsically oriented identities are dominant over more intrinsically oriented identities, where if they both exist within the self then this will make it difficult for the intrinsically oriented identity to operate optimally within the self.

This research has also contributed to research on identity theory by demonstrating that with the coexistence of two different higher-level identity standards that frame conflicting ideologies,
different outcomes can occur. One identity is able to weaken the guidance of the second identity, while the second identity is unable to have the same negative effect. As such, this research shows that there can be a dominant higher-level identity standard.

Individuals that hold strong environmental beliefs are often guided away from profligate consumerism due to the recognition of damage that consumption has on the natural environment (Ballantine & Creery, 2010). However, for this group of individuals they are recognised to reject materialistic values and as such will not have a strong MID (Ballantine & Creery, 2010; Cherrier, 2009; Johnston & Burton, 2003; McDonald et al., 2006; Sherry, 2012). As such, while this research has shown that an EID does not have the ability to interrupt the guidance of a MID towards consumerist intentions, it will be that in the absence of a MID that an EID will guide an individual away from profligate consumption. That is, this research found that MID was dominant over EID, and consequently an EID is unable to negatively influence consumerist behaviour when there is a salient MID. Therefore, while an EID can guide reduced consumption, it cannot in the presence of a MID.

MID will be the dominant identity when it coexists within the self with an EID. Consequently, this research has shown that a MID reduces the ability of an EID to guide the self toward more pro-environmental intentions and reduced consumerism. As such, in the case of EID and MID, this research shows that MID is a dominant identity, where it can operate optimally even in the presence of an EID, but an EID cannot operate optimally when there is a salient MID. That is, with the self-threat leading to extrinsic motivation (Sheldon & Kasser, 2008), and intrinsic motivation a better driver of pro-environmental behaviours (Pelletier et al., 1998), an EID will be impotent in its ability to influence consumerist intentions in the presence of a salient MID. This also contributes to environmental sociology by further suggesting that an EID will be unable to guide more sustainable levels of consumption in the presence of a salient MID.
This research highlighted the ability of higher-level identity standards to moderate the influence of one another. To date, no research has investigated the ability of one higher-level identity standard to moderate the influence of another in the guidance of the self. This provides a contribution to identity theory as differently to considering that simply the most salient identity will guide the self, this demonstrates the likelihood of concurrent guidance of different salient identities upon the self by identifying how separate higher-level identity standards can moderate the ability of one another to guide a consumer’s intentions relevant to consumerist and pro-environmental behaviours. Furthermore, the different effects of these higher-level identity standards to interrupt the guidance of one another was explained using self-determination theory, where the guidance of the extrinsically oriented MID was dominant over the guidance of the intrinsically oriented EID upon guiding behaviours where these two identities will present conflict.

6.2.4 Contributions to Psychology Surrounding Materialism and Environmental Identity

There has been a growing body of literature looking at the psychology surrounding materialism (e.g. Burroughs & Rindfleisch, 2002; Dittmar, 2007b; Kasser, 2003; Kim, 2013; Rindfleisch et al., 1997; Rindfleisch et al., 2009; Shrum et al., 2014), and a similar growing body of literature surrounding the psychology related to the natural environment (e.g. Clayton & Opotow, 2003; Kasser, 2009; Pelletier et al., 1998; Steg & Vlek, 2009; Stets & Biga, 2003; Whitmarsh & O'Neill, 2010). These areas have also been combined with regards to how they relate to the concept of achieving future sustainability (Banerjee & McKeage, 1994; Good, 2007; Kilbourne et al., 1997; Kilbourne & Pickett, 2008; Salonen & Ahlberg, 2013; Thogersen, 1995). In line with the importance of identity theory with environmental sociology to understand pro-environmental behaviours (Stets & Biga, 2003), this research has contributed to this area by showing that there is no direct barrier for an identity that frames a caring for the natural
environment (EID) to coexist with an ideologically conflicting identity that will guide profligate consumerist pursuits (MID).

As previous investigations found a negative relationship between environmentalism and materialism (Banerjee & McKeage, 1994) and materialism and environmental concern (Kilbourne & Pickett, 2008), the positive relationship between EID and MID was unexpected. The study that found a negative relationship between materialism and environmentalism was performed in 1994 (Banerjee & McKeage, 1994). As this relationship was measured with the social and cultural forces of a different time, this indicates a more readily recognised conflict between materialistic and environmental ideals when this study was performed. Because materialism has been indoctrinated into Western culture longer than environmentalism, individuals are likely to distort environmental meanings in favour of materialistic meaning (Kilbourne & Pickett, 2008). This distortion of environmental meanings in favour of material meanings will also have helped to disable the recognition of the conflict between them, and subsequently better enabled the coexistence of EID and MID, as was seen in this research.

Extending this above argument, since the early 1990s there has been an increase in the use of environmental messaging within the marketing of ‘environmentally friendly’ products, and green consumerism is now considered mainstream (Ottman, 2017). This idea that consuming such products helps the environment promotes the ideals of environmentalism and materialism simultaneously, and presents a barrier for sustainability within the dominant social paradigm (Kilbourne & Carlson, 2008). That is, by promoting the message that certain consumption can help the natural environment, marketers have helped consumers avoid the perception of conflict between EID and MID, which has better enabled them to coexist within consumers.

In contrast to the above, there are also people who recognise the conflict between consumerist and environmental ideals, which leads them to have lower levels of materialism with reduced
consumption (Ballantine & Creery, 2010; Cherrier, 2009; Johnston & Burton, 2003; McDonald et al., 2006; Sherry, 2012). The results of chronic prevention focus showing a negative relationship between EID and MID also provides insight into the likely regulatory focus orientation of these individuals. That is, these findings show people with a chronic prevention focus will be more likely to recognise the inconsistency between EID and MID. As social groups can be characterised by a particular regulatory focus orientation (Faddegon et al., 2008), groups such as voluntary simplifiers that recognise the conflict between EID and MID will be commonly characterised by a chronic prevention focus.

Within the dominant social paradigm it is difficult to obtain ecological sustainability, and one of the main issues is ingrained materialism (Kilbourne et al., 1997). This research supports this argument by showing the dominance of a MID over an EID in the guidance of behaviours relevant to ecological sustainability. As such, this research supports the notion that if social institutions continue to advance consumerist ideology that leads to the internalisation of MID (e.g. Kasser, 2016), it will be harder to make tangible progress towards ecological sustainability due to MID preventing EID from guiding consumers towards pro-environmental behaviour.

6.2.5 Methodological Contributions

From a methodological perspective, this research has advanced the application of PLS-SEM by conducting moderation analyses within structural models that included multidimensional latent constructs. This process required the creation of composite scores for the sub-dimensions of the multidimensional constructs of EID and MID, which were then applied to the PLS-SEM models within SmartPLS in order to test multiple moderating effects. As such, this research provided a methodological contribution by combining a recognised method for the creation of composite scores (Plewa et al., 2015), and using these scores within PLS-SEM
models (Henseler & Fassott, 2010). Consequently, this research presents a method by which moderation analysis can be conducted using structural equation modelling with multidimensional latent constructs. Furthermore, with the inclusion of the dichotomous variable from the mortality salience manipulation, this research also presents a method by which experimental data can be collected and applied within such moderation analyses.

6.3 Practical Implications for Marketing

Marketers often target their offerings and communications towards consumers via the shared meanings between the identities that those consumers seek to build upon and the offerings presented (Berger & Heath, 2007; Escalas, 2013; Kozinets, 2001; Luedicke et al., 2009; Schau et al., 2009). The findings of this research will enable better application within this area via understanding of how identity conflict influences the self in the guidance of pro-environmental and consumerist intentions.

By providing a better understanding of the factors that influence the coexistence of EID and MID within the self and also the resulting guidance of the self towards pro-environmental and consumerist intentions based on their comparative salience, this research enables a number of practical implications for marketing strategies. The following suggestions for the practical implications of this research are based on both the context specific findings relating to EID and MID as well as the broader theoretical implications of the research findings.

6.3.1 Implications for Marketing Strategies Targeting Identity

As consumers pursue products which are consistent with their sense of self (Escalas, 2013; Sirgy, 1982), while developing a targeted marketing strategy, marketers should consider the identities they seek to target to best align their offering with the meaning presented by these
identities. Within this process, marketers can make salient these identities to help guide consumers towards their offerings (Reed II, 2004). This research helps to better inform this process by highlighting outcomes of coexisting identities that can present conflict.

Within the process of choosing the identities they wish to align with their offering, marketers need to consider other potential identities within those targeted that might have a countervailing effect upon the guidance of the identity targeted to ensure these other identities do not have a negative influence on the effectiveness of that strategy. Specifically, this research confirmed that a MID reduced the effectiveness of an EID to guide WTS. From this, when developing a targeted marketing strategy to appeal to the frame of meaning of an identity, marketers should be mindful of disparate conflicting identities within their target market that may reduce the ability of the identity targeted to entice those people towards their offering. As such, when presenting meaning designed to entice the targeted identity, marketers should seek to reduce the influence of any countervailing identities by avoiding any direct or indirect meanings within their messages that may trigger such identities. By limiting the negative influence of conflicting identities, this should optimise the guidance of the identity targeted and increase the likelihood of positive evaluation of the offering or idea being presented. This research has shown if a marketer wants to target an EID as a means to encourage pro-environmental behaviour, they should seek to limit the salience of MID within their target market, as a salient MID will weaken the ability of EID to guide pro-environmental avenues of behaviour.

This research showed that with coexisting identities that have conflicting meanings, one of these identities could be dominant over the other in its ability to guide the self. Specifically, it was shown that if an individual has a MID, then this identity will be successful in guiding consumerist intentions regardless of the strength of the ideologically conflicting EID. From the broader perspective of conflicting identities, this provides contrast to the implication above by also showing that when there are coexisting identities that should present opposing
guidance, the resulting guidance of the self may not be a compromise of the expected guidance of these opposing identities. As such, even if there are identity standards that can present conflict to the identity targeted, this will not always be an issue. For example, if a marketer wants to target a MID, a salient EID won’t reduce the guidance towards the consumption behaviours that are guided by the MID. For example, an advertisement for a 4WD might present imagery of the vehicle in outdoor settings as well as within a prestigious showroom, where the environmental imagery will not negatively influence the ability of the MID to guide consumers within the target market towards that offering.

This research consequently tells marketers that in deciding on identities to target, they need a proper understanding of how different identities will react, as outcomes may not be easily predictable. As the outcomes will depend on the identity being targeted, marketers should look to best understand how other identities may affect the guidance of the targeted identity to better inform their strategy. Such understanding would consequently allow marketers to limit the influence of countervailing identities and also optimise the guidance of the targeted identity for a successful strategy. For example, marketers could test the application of meaning relating to different conflicting identities in conjunction with their offering and determine how these combined meanings influence the expected guidance of the targeted identity towards it. With this understanding, marketers will subsequently have a better idea of what identities they should target as well as those they should seek to limit the salience of.

6.3.2 Optimising the Guidance of a Single Identity

There will be contexts when different countervailing identities will be able to detract from the guidance of a targeted identity, therefore, it will be useful to understand factors that will minimise the possible interruption of this desired guidance. An understanding of such factors
better enables marketers to encourage a more consistent guidance from a targeted identity towards their offering or idea. As such, the findings relating to conditions when EID and MID are more likely to coexist within a consumer provide marketers with a better understanding for how to best target the uninterrupted guidance of a single identity and maximise the effectiveness of the primary meanings within their strategy. That is, a consumer will be less likely to have concurrently salient identities that present conflicting meanings if they also have a chronic prevention focus and mortality salience induced. As such, marketers could look to apply these concepts as a means to get the optimal guidance from a targeted identity.

The concept of mortality salience has been considered previously in consumer research (Ferraro, Shiv, & Bettman, 2005; Mandel & Heine, 1999). The results of this study further contribute by providing marketers with a better understanding of its potential application in order to obtain consistent guidance from a single identity with reduced likelihood of having a conflicting identity also influencing the self. While there was a positive relationship between EID and MID within the control group, this positive relationship was not seen for those that had mortality salience induced. As such, with mortality salience induced a consumer will be less likely to have concurrently salient identities that can present conflicting meanings. Therefore, if marketers wish to encourage a specific and consistent guidance from an identity, then mortality salience can be an option they may seek to utilise within the communications they provide with their offerings to encourage this consistency. This application of mortality salience should serve to limit any potentially countervailing effects from different identities and subsequently help to optimise the guidance of the self from the identity targeted.

One potential way by which to use mortality salience will be to provide particular triggers that present meaning that targets a particular identity and to concurrently present mortality salience with this meaning. As mortality salience has already been shown to lead to greater conviction towards an idea (McGregor et al., 2001), marketers may be able to better optimise the guidance
of an identity within targets to create a stronger connection with their offering or idea by increasing conviction towards the meanings related to it and reducing the likelihood of interference of any potentially countervailing identities. For example, if a social marketer wants to encourage emissions reduction, in conjunction with meanings that present the importance of the natural environment, they could present the dangers to human life of the environmental disasters that some have suggested will increase as a result of carbon emissions. While mortality salience has been shown to negatively influence sentimentality towards the natural environment, this effect is removed for those who have a stronger environmental identity (Fritsche & Häfner, 2012). As such, it would be important to trigger the salience of the EID through meanings relating to the natural environment prior to triggering the mortality salience. With this process, it could be anticipated the mortality salience will solidify the self-importance of the EID increasing the likelihood the audience will reduce their emissions.

Extending the above, many social and non-for-profit marketing campaigns are inherently connected to the concept of death. For example, social marketing to encourage people to stop smoking or drink driving, and non-for-profit campaigns to raise money for cancer will inherently involve themes that will trigger mortality salience within their audience. Considering the findings of this research, such campaigns should seek to promote singular, consistent messages rather than try to incorporate multiple different themes within their campaigns. Furthermore, the findings would also be relevant to physical locations where marketers present their messages. For example, hospitals are places where mortality salience would commonly be induced within the patrons. As such, for marketers who wish to present messages within such environments, they will need to be mindful of their use of multiple and potentially conflicting meanings within their messages.

While regulatory focus can relate to both a chronically present trait within the self as well as a transient manipulatable state (Higgins et al., 1997), the findings of this research related to the
inherently present chronic regulatory focus. As such, these findings are not applicable to the manipulation of a consumer’s temporary state. However, it is recognised that various social groups may consist of consumers that possess a chronic regulatory focus relating to their group membership (Faddegon et al., 2008). As such, the findings for chronic prevention focus will be applicable for marketers who target groups that are likely to consist of consumers with a chronic prevention focus, where these groups will be more likely to recognise inconsistency between conflicting identities.

Extending the above, it is also recognised that chronic regulatory focus will be internalised and developed based on an individual’s experiences through life (Förster et al., 2001). From this perspective, if marketers and public policy makers sought to apply long term strategies in which to encourage a chronic prevention focus within a particular group, then this would enable them to also optimise the guidance on non-conflicting higher-level identity standards within that group. For example, within the context of this research it is recognised that a macromarketing will help with the issues within the dominant social paradigm, where meaningful progress towards sustainability is made difficult within a consumerist society (Kilbourne & Carlson, 2008). Hence, such a macromarketing strategy could also seek to encourage internalisation of a chronic prevention focus in order to enable a more consistent guidance of EID towards more sustainable consumption, without interruption from a MID.

6.3.3 Implications for Sustainability and Public Policy

This research has consistently applied the logic of a growing body of literature that has recognised that mass consumerism presents a significant threat to ecological sustainability (Kilbourne & Carlson, 2008), where individual consumption needs to be tempered as a means towards future sustainability and protection of the natural environment (Sheth et al., 2011).
With social marketing suggested as a way to encourage consumption reduction (Peattie & Peattie, 2009), identity construction able to lead to a reduction in excessive consumption (Cherrier & Murray, 2002), and macromarketing suggested to counter the consumerist sentimentality within the dominant social paradigm (Kilbourne & Carlson, 2008), the findings of this research also provide insight that can be used for better strategies by social marketers and public policy makers in order to encourage more sustainable levels of consumption through more effective macromarketing approaches.

Existing arguments have recognised that ecological sustainability will be difficult to reach while applying the ideals of the current dominant social paradigm where the marketing practices that promote protection of the natural environment are the same practices that promote mass consumerism (Kilbourne & Carlson, 2008). The findings of this research provide support for this argument as they show the problematic nature of MID in how it guides individuals towards profligate consumerism and weakens the ability of an EID to guide avenues of pro-environmental behaviour. That is, this research confirms that when materialistic ideology is internalised within consumers’ identities within society (Kasser et al., 2004), this not only leads to a stronger guidance towards unsustainable profligate consumerism, but it also weakens the ability of internalised pro-environmental ideology to lead to more sustainable consumption. As such, it shows that such internalised materialistic ideology has a double-sided negative effect preventing more sustainable consumption behaviours.

Tempering of consumption is needed to enable a sustainable future (McDonald et al., 2006; Peattie & Peattie, 2009; Sheth et al., 2011). This research provides policy makers and social marketers with the knowledge that solely promoting pro-environmental ideology and caring for the natural environment will not suffice as a means towards consumption reduction. If the suggested tangible steps are to be taken towards sustainable consumption reduction via social marketing (Peattie & Peattie, 2009), this strategy should aim to reduce the salience of
consumers’ MID. This research shows that while a MID is salient then it will present as a barrier towards ecologically sustainable consumption. As such, just as important as promoting environmental sentimentality is to discourage materialistic ideals, as they will not allow an EID to provide optimal guidance of the self.

By applying a long-term macromarketing approach, social marketers and policy makers can begin to identify and apply methods that challenge the ideals of materialism to remove this barrier to sustainable consumption. There are multiple studies that have shown materialism results in reduced subjective well-being (Bauer et al., 2012; Burroughs & Rindfleisch, 2002; Dittmar, 2007a, 2007b; Kasser et al., 2014). Conversely, there are also studies that connect pro-environmental behaviours with better well-being via intrinsic satisfaction (Brown & Kasser, 2005; Rich et al., 2017). Combining these arguments with the findings of this research, a macromarketing strategy that promotes an intrinsically motivated mindful approach to tempered consumerism as a means towards intrinsic well-being will provide significant steps towards long-term sustainability (Sheth et al., 2011).

The findings of this research also have implications for consumers themselves with regards to better understanding their motivations, where they may hold different identities which can subconsciously influence their decisions. This has specific implications for any consumers that may wish to be more environmentally friendly, where they may hold a MID that inhibits these intentions. Furthermore, extending the arguments of the previous paragraph, it has been shown that self-consistency correlates with subjective well-being (Cross et al., 2003). As such, consumers should be mindful of potentially conflicting identities they hold as both a means to understand their own behavioural motivations, and as a means for greater personal well-being.
6.4 Limitations

The first limitation of this research that relates to the singular context in which it was conducted. Specifically, it can’t be confirmed whether these research findings will be transferrable to other identities or whether they are dependent purely on the context of the higher-level identity standards of EID and MID that were considered within this research. Given that there is an array of identities that can exist within individuals, this research focused on just two ideologically opposed identities, with the intention to provide a better understanding of identity conflict by considering higher-level identity standards, which relate to measurable values, beliefs and ideals that provide the agency for the construction of more concrete goals (Tsushima & Burke, 1999). EID and MID were chosen as they were deemed to relate to conflicting ideologies that are commonly promoted within Western society, and as such provided a good context by which to research conflicting higher-level identity standards within individuals. However, the results and conclusions of this research are limited to this context. With the recognition of the wide variety of avenues for research that identity related goals can offer consumer research (Escalas, 2013), additional research into different higher-level identity standards will help to better understand the transferability of these results and also the contextual nuances that these different identities can offer theory and practice.

While the research instrument measured higher-level identity standards that were deemed to cover a broader level of understanding as it can relate to conflict within the self, it did not directly measure the perceived conflict within the subjects being investigated. This was because it was first considered as important to see if the expected effects of conflict appeared within the sample, and that if the recognition of conflict was measured, then this measure would have artificially influenced the results and the nature of such conflict as it exists naturally would not have been observed. As such, this research instead presented existing arguments to outline
the inherent conflict in ideology relating to the natural environment and materialistic consumerism and investigated how this ideological conflict affects the ability for the identities to coexist within the same self and the subsequent guidance of that self.

Although its use was justified within section 4.3.2, the material values scale by Richins (2004) was not specifically developed to measure what this thesis has referred to as MID. The scale was traditionally applied to measure a consumer value orientation, and its use within this research related to identity theory. As such, while its usage is argued to provide a good measurement for the intended meaning of MID, the origins of the scale are from a different theoretical and conceptual background.

Another limitation of the research method also relates to the cash equivalent incentives that were provided to the respondents by the panel company, Qualtrics, to complete the survey. While these cash equivalents were deemed relatively small for an Australian sample, they could have the potential to create a slight bias within the sample toward those that desire such cash equivalents and hence be more likely to have a MID.

While this research presented the conclusions of the guidance of EID and MID towards compulsive buying, status consumption, voluntary simplification and WTS, as higher-level identity standards present guiding values relating to a vast array of potential concrete activities (Tsushima & Burke, 1999), EID and MID will similarly guide the self towards many behaviours that are reflective of their meanings. As this research developed conclusions based on intentions towards four broader general directions of behaviour that can be guided by these identities, it does not provide an exhaustive illustration of the potential guidance and behavioural outcomes of these two higher-level identity standards, presenting a further limitation to the broader applicability of the results of the research. The four outcome variables were chosen as they were deemed to represent broader directions of guidance relating to EID.
and MID that also presented the possibility for conflict between materialistic and environmentalist ideology. However, this research did not look at how these identities influence specific behaviours (e.g. driving a car) that may similarly present conflict between materialistic and environmentalist ideology. As such, a further limitation of this research is that while it provides insight into the influence of theoretically conflicting identities towards broader avenues of behaviour, it does not further show how they will impact more specific concrete behaviours that relate to these identities.

6.5 Directions for Future Research

This research provides an enhanced understanding of how two separate and theoretically conflicting higher-level identity standards can coexist within the self and subsequently influence the broader directions of a consumer’s intentions. However, while it provided some interesting initial findings with regards to the coexistence of two ideologically conflicting higher-level identity standards and how this can influence the guidance down broader avenues of behaviour, this thesis further opens a research area where there is significant scope for continued research based on the findings provided.

6.5.1 Additional Research into Conflicting Identities on Consumer Behaviour

While this research began to provide an understanding of the outcomes and likelihood as to the existence of theoretically conflicting identities, the conclusions of this research were limited to the context of the identities and outcome variables. As such, to better assess the transferability of the results, additional research needs to be conducted that considers other identities and how the potential conflict between them influences the behaviours that should be guided by those identities. For example, research could consider the potential conflict between moral identity
and MID upon the variability down avenues of charitable behaviours, as moral identity has already been considered with regards to how it influences such behaviours (Reed et al., 2007). Such research would provide further contrast to the ability of identities to conflict with one another and how this conflict influences avenues of consumer and social behaviours. Furthermore, as materialism has been argued to have the ability to create conflict with collectively oriented values (Burroughs & Rindfleisch, 2002), it would also provide further contrast into how MID may conflict with other collectively oriented identities. Such additional research could also consider more than two identities that present conflict and how this influences the direction of an individual’s consumer and social behaviours.

While this research considered many previous findings and arguments to suggest that EID will relate more to intrinsic motivation and MID will relate to extrinsic motivation, intrinsic and extrinsic orientations of motivation were not explicitly measured. As such, additional research into the coexistence of conflicting identities could also look to explicitly measure whether the identities under consideration relate more to intrinsically or extrinsically oriented motivations. As self-determination theory has already been considered with regards to when identities are consistent within an authentic self (Soenens & Vansteenkiste, 2011), as well as how identities are formed and assimilated into the self (Luyckx, Vansteenkiste, Goossens, & Duriez, 2009; Ryan & Deci, 2003), such additional research will extend the findings of this thesis and further advance existing arguments connecting self-determination theory with identity theory to better understand identity construction, identity conflict, and behavioural motivation.

6.5.2 Additional Research into the Conflict between EID and MID

As this research did not provide an exhaustive illustration of the occurrence of conflict and specific behavioural outcomes resulting from coexisting EID and MID, there is also scope for
further research within the specific context of conflict between EID and MID. Firstly, as this research did not measure when individuals perceive conflict between environmental and materialistic ideals, additional research could look at how this perception of conflict impacts the coexistence of these identities as well as the resulting guidance of the self. While this research provided insight into the coexistence of these ideologically conflicting identities and the resulting guidance as it naturally occurs within society, such additional research could provide better insight into the specific occurrence of conflict between these identities. This may also involve experimental procedures where the perception of conflict is triggered within a test group to see how this impacts the resulting guidance of the individual.

Additional research could also be conducted into how the conflict between EID and MID would influence specific concrete behaviours, to understand how the coexistence of EID and MID is able to influence them. Rather than considering more abstract higher-level identity standards that present a broad area of meaning, this additional research could also look to investigate more specific concrete identities (e.g. ‘conservationist’ vs ‘Humvee enthusiast’). Hence, these lower level more concrete identities may act as mediators between the higher-level identity standards and the more specific concrete behaviours.

6.5.3 Investigating Multiple Meanings within Marketing Communications

While it was recognised in the practical implications that marketers need to be mindful of the combination of meaning they present within their marketing strategies, this research did not explicitly investigate the use of such meanings. As such, this thesis also opens an avenue for additional research that can begin to investigate the effectiveness of the use of multiple and conflicting meanings within marketing strategies using the frame of identity theory. For example, within the same context, such additional research could involve experimentation with
combinations of environmental and materialistic meanings to test their effectiveness in social and commercial marketing strategies for different combinations of EID and MID. Such research would provide additional understanding on the outcomes of coexisting conflicting identities on consumer behaviour and provide additional practical implications for marketers in their use of multiple meanings.

While this research has shown that chronic prevention focus can reduce the likelihood of coexistence between identities that can present conflicting meaning, additional research would need to be conducted to determine the best ways by which this can be practically applied by marketers. While this thesis only considered the effects of internalised chronic regulatory focus, regulatory focus is something that can also be activated within individuals through various triggers (Johnson & Yang, 2010). As such, additional research could also test whether triggering a consumer’s prevention focus results in similar effects being observed where it may be able to reduce the ability of theoretically conflicting identities to be concurrently salient within the same person. Such research would not only provide additional contrast to the theoretical arguments and findings of this research, it should also provide marketers with potential options to optimise the guidance of a singular identity standard to maximise the effectiveness of meanings targeting that identity.

6.6 Conclusion

This thesis has applied identity theory to investigate the coexistence between the ideologically conflicting higher-level identity standards of EID and MID and the resulting guidance toward broader avenues of pro-environmental and profligate consumerist intentions. The findings suggest that despite the conflict that exists between the ideals and meaning presented by both identities, that they do not always present as mutually exclusive within the self, and there are
conditions in which coexistence between these ideologically conflicting identities is more likely, as was seen with a positive relationship between EID and MID within the control condition and low chronic prevention focus group. It was also shown that while a MID had the ability to weaken the ability of an EID to guide the self toward pro-environmental avenues of behaviour, an EID did not have the ability to weaken the guidance of a MID to guide more profligate consumerist avenues of behaviour. This research consequently contributes to identity theory and consumer research by showing that ideologically conflicting higher-level identity standards can coexist within the self and presented conditions under which this coexistence is more and less likely. Furthermore, it has shown that when there is coexistence between two conflicting higher-level identity standards, while this can significantly weaken the ability of one of these identities to guide the self, it is also possible that one of these identities will present as dominant where it diminishes the other identity’s ability to guide the self, while its own ability to guide the self will remain uninterrupted.
Appendix 1 – Research Questionnaire

Below are the question items, scale points and flow statements that the research instrument consisted of.

Q3 and Q4 were the experimental manipulation and control condition that were presented for mortality salience. While both test and control condition statements are included below (indicated), only one set of Q3 and Q4 were included for respondents depending on whether they were in the test or control group.

While presented in this document in the matrix format, Q11, Q13, Q16, and Q21 were presented to respondents as drag and drop, and drop-down menu response formats to limit the effects of common method bias.

Thank you for taking the time to visit this survey. This survey is to collect data for a PhD study that is being conducted at the University of Adelaide. The study is investigating consumer attitudes and behaviours relating to their own material consumption the natural environment.

This survey should take approximately 10 minutes to complete and the responses will be used purely for academic purposes. Please answer as honestly as possible and be aware that all responses are completely confidential and your identity will not be known to the researchers.

If you have any questions regarding this study please contact William Lake at william.lake@adelaide.edu.au

Thank you again for your time.

Q1 Are you aged 18 or over?

☐ Yes (4)
☐ No (5)

If No Is Selected, Then Skip To End of Survey
Q2 Please indicate how you feel about the following statements in regards to yourself.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, I am focussed on preventing negative things in my life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I am anxious that I will fall short of my responsibilities and obligations.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>I frequently wonder how I will achieve my hopes and aspirations.</td>
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<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I often think about the person I am afraid I might become in the future.</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>I often think about the person I would ideally like to be in the future.</td>
<td>○</td>
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<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>I typically focus on the success I would like to achieve in the future.</td>
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</tr>
<tr>
<td>I often worry that I will fail to accomplish my goals.</td>
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<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I often think about how I will achieve success.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I often imagine myself experiencing bad things I fear might happen to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>I frequently think about how I can prevent failures in my life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I am more motivated toward preventing losses than I am toward achieving gains.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My major goal right now is to achieve my ambitions.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My major goal right now is to avoid becoming a failure.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I see myself as someone who is primarily striving to reach my &quot;ideal self&quot;, to fulfil my hopes, wishes and aspirations.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I see myself as someone who is primarily striving to become the person I &quot;ought&quot; to be to fulfil my duties, responsibilities and obligations.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>In general, I am focussed on achieving positive outcomes in my life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I often imagine myself experiencing good things I hope will happen to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Overall, I am more oriented towards achieving success than preventing failure.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q3 (test group) Please write the first thing that comes to mind when you think about your own death.

Q4 (test group) What do you think will happen to your physical body when you die?

Q3 (control group) What are the feelings that come to mind when you think about going to the dentist?

Q4 (control group) What do you think will happen next time you go to the dentist?

Q5 How many triangles would you say are in the image above?

- 9
- 13
- 1
- 3
- 6
- 39
Q6 To what age group do you belong?
- Under 18 (1)
- 18-25 (2)
- 26-35 (3)
- 36-45 (4)
- 46-55 (5)
- 56-65 (6)
- 66-75 (7)
- Over 75 (8)

Q7 What is your gender?
- Male (1)
- Female (2)

Q8 What is your approximate weekly household income?
- Under $300 (1)
- $300 to $599 (2)
- $600 to $999 (3)
- $1,000 to $1,499 (4)
- $1,500 to $1,999 (5)
- $2,000 to $2,999 (6)
- $3,000 to $3,999 (7)
- $4,000 or more (8)

Q9 Were you born in Australia?
- Yes (1)
- No (3)
Q10 Can you please indicate your agreement/disagreement as to how each of the statements on the left apply to yourself.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I admire people who own expensive cars, clothes and homes.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Some of my life's most important achievements have/will include acquiring material possessions.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I don't place much emphasis on the objects I own as a sign of my success.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The things I own say a lot about how well I'm doing in life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I like to own things that impress people.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q11 Can you please indicate your agreement/disagreement as to how each of the statements on the left apply to yourself.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I try to keep my life simple as far as possessions are concerned.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>The things I own aren't all that important to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Buying things gives me a lot of pleasure.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I like a lot of luxury in my life.</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I put less emphasis on material things than most people I know.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q12 Can you please indicate your agreement/disagreement as to how each of the statements on the left apply to yourself.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have all the things I need to really enjoy life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My life would be better if I owned certain things I don’t have.</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I wouldn’t be any happier if I owned nicer things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’d be happier if I could afford to buy more things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q13 Now for some statements regarding you and the natural environment. Please again indicate your level of agreement/disagreement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I spend a lot of time in natural settings (forests, mountains, deserts, beaches, fields etc.).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have never seen a work of art that is as beautiful as a work of nature like a sunset or a mountain range.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I feel upset or stressed, I can feel better spending some time outdoors communing with nature.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of myself as part of nature not separate from it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living near wildlife is important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really enjoy camping and hiking outdoors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would feel that an important part of my life was missing if I was unable to get out and enjoy nature from time to time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I receive spiritual sustenance from nature.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to garden.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q14 Can you please indicate your agreement/disagreement as to how each of the statements on the left apply to yourself.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I had enough time and/or money I would certainly donate some of it to working for environmental causes</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have a lot in common with environmentalists as a group.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Behaving responsibly toward the earth and living a sustainable lifestyle is part of my moral code.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My own interests usually seem to coincide with the position advocated by environmentalists.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Please select 'Strongly Disagree'.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Engaging in environmental behaviours is important to me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I believe that some of today's problems could be cured by returning to a more rural lifestyle in which people live in harmony with the land.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I keep mementos from the outdoors in my house such as shells, rocks or feathers.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

If Please select "strongly dis... Is Not Selected, Then Skip To End of Block
Q15 Half way through now. Thank you for continuing. It is very much appreciated :)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I take pride in the fact that I could survive outdoors on my own for a few days.</td>
<td>○</td>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Sometimes I feel like parts of nature—certain trees, storms or mountains—have a personality of their own.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would rather live in a small room or house with a nice view than a bigger room or house with a view of other buildings.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel I have a lot in common with other species.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>In general, being a part of the natural world is an important part of my self image.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel that I have roots to a particular geographic location that had a significant impact on my development.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Being a part of the ecosystem is an important part of who I am.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q16 Please indicate how you feel about the following statements as they apply to you right now.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the moment, shopping would be a way of relaxing and forgetting my problems.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel that something inside me is pushing me to go shopping</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have a desire to buy something (e.g. clothes, jewelry, electronics, furniture, sporting equipment etc.)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would like to go shopping and buy something.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>If I were to enter a shopping mall, I would instantly wish to go into a store and buy something</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel like spending some money.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There are a number of things I can think of (e.g. clothes, jewelry, electronics, furniture, sporting equipment etc.) that I intend to purchase soon.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>At the moment, if I went into a store I would likely buy something, just because I'd have to have it.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I can see myself buying something soon and not showing other people as it would seem unnecessary purchase.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There are things I could buy right now that would make me happier.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There's a few things on my mind that I would like to buy.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q17 Please indicate how you feel about the following statements as they apply to you right now.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would buy something just because it has status</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am interested in new products with status</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I would pay more for a product with status</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The status of a product is irrelevant to me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>A product would be more valuable to me if it had some snob appeal</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q18 How willing would you be to..

<table>
<thead>
<tr>
<th>Action</th>
<th>Very willing</th>
<th>Willing</th>
<th>Somewhat willing</th>
<th>Neutral</th>
<th>Somewhat unwilling</th>
<th>Unwilling</th>
<th>Very unwilling</th>
</tr>
</thead>
<tbody>
<tr>
<td>pay much higher prices in order to protect the environment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>pay much higher taxes in order to protect the environment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>accept a drop in your standard of living to protect the environment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q19 I will always do what is right for the environment, even if costs me money and takes up my time.

- Strongly agree (4)
- Agree (5)
- Somewhat agree (6)
- Neither agree nor disagree (7)
- Somewhat disagree (8)
- Disagree (9)
- Strongly disagree (10)
Q20 When I next buy something it will be important that..

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really need the product.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>it is a useful product.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>the product is long lasting.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I absolutely require the product.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I don't have a fully functioning old one.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>it is not an unnecessary luxury.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>it is in accordance with the principle of frugal consumption.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q21 It is my intention to...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>try to make things I buy last as long as possible.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>replace household appliances when they are still functioning.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>replace my clothes before they are worn out.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q39 Thank you very much for completing this survey. If you have any questions regarding this survey or the study for which it is a part, please email William Lake. william.lake@adelaide.edu.au
Appendix 2 - $Q^2$ Values for the PLS-SEM Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>EID -&gt; MID</td>
<td>.090</td>
</tr>
<tr>
<td>Promotion Focus x EID -&gt; MID</td>
<td>.130</td>
</tr>
<tr>
<td>Prevention Focus x EID -&gt; MID</td>
<td>.150</td>
</tr>
<tr>
<td>Mortality Salience x EID -&gt; MID</td>
<td>.080</td>
</tr>
<tr>
<td>MID -&gt; Status Consumption</td>
<td>.268</td>
</tr>
<tr>
<td>MID -&gt; Compulsive Buying</td>
<td>.196</td>
</tr>
<tr>
<td>EID -&gt; WTS</td>
<td>.353</td>
</tr>
<tr>
<td>EID -&gt; Voluntary Simplification</td>
<td>.045</td>
</tr>
<tr>
<td>MID x EID -&gt; Voluntary Simplification</td>
<td>.119</td>
</tr>
<tr>
<td>MID x EID -&gt; WTS</td>
<td>.456</td>
</tr>
<tr>
<td>EID x MID -&gt; Compulsive Buying</td>
<td>.251</td>
</tr>
</tbody>
</table>
Appendix 3: Correlations Matrix of Latent Constructs

<table>
<thead>
<tr>
<th></th>
<th>MID S</th>
<th>MID H</th>
<th>MID C</th>
<th>EID E</th>
<th>EID C</th>
<th>PREV F</th>
<th>PROM F</th>
<th>Comp B</th>
<th>Stat C</th>
<th>WTS</th>
<th>Vol S</th>
</tr>
</thead>
<tbody>
<tr>
<td>MID S</td>
<td>1</td>
<td>.577*</td>
<td>.544*</td>
<td>0.03</td>
<td>0.056</td>
<td>.207*</td>
<td>.220*</td>
<td>.478*</td>
<td>.429*</td>
<td>-0.092</td>
<td>-0.310*</td>
</tr>
<tr>
<td>MID H</td>
<td>.577*</td>
<td>1</td>
<td>.544*</td>
<td>0.067</td>
<td>0.063</td>
<td>.253*</td>
<td>.282*</td>
<td>.435*</td>
<td>.480*</td>
<td>-0.079</td>
<td>-0.111</td>
</tr>
<tr>
<td>MID C</td>
<td>.544*</td>
<td>.544*</td>
<td>1</td>
<td>-0.078</td>
<td>-.192*</td>
<td>-0.026</td>
<td>.268*</td>
<td>.410*</td>
<td>.494*</td>
<td>-0.111</td>
<td>-.407*</td>
</tr>
<tr>
<td>EID E</td>
<td>0.03</td>
<td>0.067</td>
<td>-0.078</td>
<td>1</td>
<td>.537*</td>
<td>.279*</td>
<td>.146*</td>
<td>0.103</td>
<td>0.038</td>
<td>.565*</td>
<td>.296*</td>
</tr>
<tr>
<td>EID C</td>
<td>0.056</td>
<td>0.063</td>
<td>-.192*</td>
<td>.537*</td>
<td>1</td>
<td>.202*</td>
<td>.188*</td>
<td>.140*</td>
<td>0.025</td>
<td>.512*</td>
<td>.266*</td>
</tr>
<tr>
<td>PREV F</td>
<td>.207*</td>
<td>.253*</td>
<td>-.026</td>
<td>.279*</td>
<td>.202*</td>
<td>1</td>
<td>.210*</td>
<td>.283*</td>
<td>0.125</td>
<td>.248*</td>
<td>.160*</td>
</tr>
<tr>
<td>PROM F</td>
<td>.220*</td>
<td>.282*</td>
<td>.268*</td>
<td>.146*</td>
<td>.188*</td>
<td>.210*</td>
<td>1</td>
<td>.324*</td>
<td>.301*</td>
<td>.142*</td>
<td>0.017</td>
</tr>
<tr>
<td>Comp B</td>
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<td>.435*</td>
<td>.410*</td>
<td>0.103</td>
<td>0.140</td>
<td>.283*</td>
<td>.324*</td>
<td>1</td>
<td>.571*</td>
<td>0.069</td>
<td>-0.097</td>
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<tr>
<td>Stat C</td>
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<td>.480*</td>
<td>.494*</td>
<td>0.038</td>
<td>0.025</td>
<td>0.125</td>
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<td>1</td>
<td>-0.056</td>
<td>-0.327*</td>
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<td>-0.111</td>
<td>.565*</td>
<td>.512*</td>
<td>.248*</td>
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<td>1</td>
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<tr>
<td>Vol S</td>
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<td>-.111</td>
<td>-.407*</td>
<td>.296*</td>
<td>.266*</td>
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</table>

The above correlations matrix shows the correlations of the composite scores of all the core constructs of this research. The table shows that the related constructs correlate as expected and demonstrate acceptable convergent and discriminant validity, further supporting the conclusion of such validity as was demonstrated in section 4.7.
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