Capturing Enculturation Awareness:

Conscious Negotiations between Culture and the Self.

by

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Abstract

Enculturation (cultural acquisition during identity development) has often been conceptualised as an unconscious process of cultural internalization. However, little research has explicitly examined the degree to which people are aware of cultural influences on the self (enculturation awareness) and how varying levels of awareness may influence the development of the self-concept. Drawing from extant qualitative research (Balanovic & Ward, 2013), the current investigation addressed this paucity through the development of the Enculturation Awareness Scale (EAS), which captures the degree to which individuals have consciously considered and come to understand cultural influences on the self. Using two distinct samples drawn from English speaking, multicultural nations (sample 1, New Zealand, N = 224; sample 2, New Zealand, Australia, USA, N = 317), the results present initial evidence for the validity and reliability of the EAS by demonstrating consistent relationships between the EAS and criterion measures of identity exploration (Cultural-Identity Exploration, Exploration in Depth, Exploration in Breadth, Ruminative Exploration), identity clarity (Cultural Identity Clarity, Self-Concept Clarity, Identity Coherence), and identity commitment (Identification with Commitment, Commitment Making). Furthermore, the emergent findings situate enculturation awareness within a nomological network of theoretically related constructs such as perceived agency, empathy and positive psychological outcomes. The development of the EAS has important implications for future theorising concerning the dynamic interplay between culture and the development of the self-concept.

Keywords: Enculturation awareness, scale development, culture, self-concept.
Dedicated to Daniel
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**Introduction**

Everyday perceptions of culture often conjure up images of uniquely flavoured foods, diverse modes of dress and vibrant celebrations. Anthropologists and sociologists have long recognised, however, that these tangible aspects of culture are merely expressions of the underlying values, beliefs and worldviews that are at the foundation of any given society (Berry, Poortinga, Segall, & Dasen, 2002). Although ‘culture’ has been defined in a multitude of different ways, many social scientists now agree that, in its essence, culture describes a system of shared meanings that allows people to interpret their everyday experiences in meaningful ways and communicate those experiences to others (Berry et al., 2002; Geertz, 1973; Y. Kashima, Koval, & Kashima, 2011; Lehman, Chiu, & Schaller, 2004).

Many such scholars have highlighted the fact that culture not only shapes the way that people perceive the world around them, it also intimately shapes the way that people come to perceive *themselves* (Christopher & Bickhard, 2007; Geertz, 1973; Kitayama, Duffy, & Uchida, 2005; Lehman et al., 2004; Markus & Kitayama, 1991; Markus, Mullally, & Kitayama, 1997). As Indian cultural leader, Mohandas Karamchand Gandhi, eloquently expressed “A nation’s culture resides in the hearts and in the soul of its people (Tendulkar & Nehru, 1990, p. 10).” Echoing this perspective, numerous studies have confirmed that the formation of one’s *very sense of self* is significantly influenced by the cultural context within which that self is embedded (Bigler, Neimeyer, & Brown, 2001; Bochner, 1994; G. Dimaggio, Vanheule, Lysaker, Carcione, & Nicolò, 2009; P. Dimaggio, Markus, & Rose, 2010; Markus & Kitayama, 1991, 2010; Markus et al., 1997; Triandis & Suh, 2002).
In light of this research, it can be said that culture is just as much a part of people as they are a part of culture – and to attempt to comprehend one without the other would result in an incomplete understanding of the human experience. As such, it is imperative that we better our understanding of the intimate relationship between culture and the self-concept.

**The Self-Concept**

A number of studies have shown that having a clear and coherent understanding of one’s self-concept is considered to be at the bedrock of psychological well-being (Berzonsky, 2003; Bigler et al., 2001; Donahue, Robins, Roberts, & John, 1993; Higgins, 1987; Schwartz, Klimstra, et al., 2011; Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006). The self-concept being a polysemous construct however has meant that is often used interchangeably with terms such as self-construal, self-definition, self-representation, and self-identity (Klein, 2012; Schwartz, Luyckx, & Vignoles, 2011). It is, therefore, essential that researchers present clear conceptualizations of the self-concept when using it in their investigations. As the focus of this paper is on the dynamic interplay between culture and identity, we adopt a cross-cultural conceptualisation of the self-concept, which is comprised of three main components: an *individual* identity, a *relational* identity and a *collective* identity (E. S. Kashima & Hardie, 2000; Y. Kashima et al., 2011; Sedikides & Brewer, 2001). An *individual* identity consists of the preferences, goals and perspectives that are unique to each individual (often referred to as the independent self-construal). A *relational* identity is defined by the individual’s key social roles and relationships that go on to form one’s social perceptions of the self (i.e., the interdependent self-construal). Lastly, a *collective* identity is characterised by the individual’s subjective experience of belonging to a wider social group (i.e., his or her social categorisations; Brewer & Gardner, 1996).
All three components are considered to be fundamental in shaping one’s overall self-concept. Despite their interrelationships, only the *individual* and *relational* identities describe the actual constituents of one’s ‘private identity’ or ‘personal self-concept’ (Hogg, Terry, & White, 1995).’ Collective identity, on the other hand, is the evaluation of which social categories (e.g., culture, nation, religion) an individual identifies with and, as such, is associated with a ‘public identity’ (Brewer, 1991).’ Indeed, personal identity theory has primarily focused on the individual-level constituents and experiences concerning a core sense of self (Hogg et al., 1995), while social identity theory has primarily focused on group-level psychological processes and identity dynamics (Ellemers, Spears, & Doosje, 2002). Therefore, an important distinction between personal identity research and social identity research is that they are situated at fundamentally different levels of analysis (Hogg et al., 1995). As this thesis is interested in understanding how culture shapes the constituents of one’s personal self-concept (those aspects of culture that influence private perceptions of the self), questions concerning culture’s influence on one’s collective identity (or social categorisations) are not included.

**The Self-Concept and Culture**

Based on the cross-cultural conceptualisation of the self-concept, it is argued that the formation of a coherent and stable sense of self requires individuals to establish a clear sense of both their *individual* and *relational* identities (Hogg et al., 1995) by addressing two fundamental identity questions – ‘Who am I?’ and ‘What is my role?’

Finding answers to these questions can be a rather arduous task, as individuals strive to find their place in a network of social ties, while at the same time, endeavour to establish a unique self that satisfies their need for autonomy and distinctiveness (Brewer, 1991; Hornsey & Jetten, 2004; Markus & Kitayama, 1991). To aid this process, individuals often use the
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culturally sanctioned values, beliefs and worldviews as a guiding framework for making important identity decisions (e.g., choices around one’s education, occupation, romantic partnerships; Schwartz, 2005; Timotijevic & Breakwell, 1999). Culture, in this sense, acts as a reference point that people use to structure their identity development. The formation of a coherent self-concept is, hence, established by the successful balance between personal wants and beliefs within the bounds and expectations of the cultural community (Brewer, 1991; Cast & Burke, 2002; Markus et al., 1997; Sánchez, 2010).

The dynamic relationship between culture and identity formation is still far from being completely understood. One of the major setbacks to our current understanding comes from the fact that much of the previous research has been premised on static and homogenous conceptualisations of culture and identity, where the individual is ‘influenced’ by a single culture and his or her role is to either accept or reject socially sanctioned identity options (Christopher & Bickhard, 2007; Ho. David, 1995). Such conceptualisations are limited in that they cannot adequately explain: a) the bidirectional relationship between individuals and their cultural environments, where people re-make and re-construct their cultures (Berry et al., 2002; Christopher & Bickhard, 2007; Shimahara, 1970), and b) how this dynamic between culture and identity manifests when there is more than one cultural reference point, as is the case for individuals who experience intercultural contact (Berry et al., 2002).

The latter of these two criticisms is of particular concern considering the increasingly interconnected nature of cultures in our world today. Although cross-cultural interactions are by no means a new phenomenon (Arnett, 2002; Fuligni & Tsai, 2014), the rate and scope of cultural exchange continue to rise due to rapid advances in telecommunication and internet technologies (Arnett, 2002; Fuligni & Tsai, 2014; Sharma & Sharma, 2010). Consequently, people are becoming increasingly exposed to a wide array of cultural perspectives, each bringing with them their own unique set of values, beliefs and worldviews. Such exposure to
alternatives gives individuals a greater freedom of choice but, at the same time, the sheer scope of identity options can also leave people feeling uncertain and confused (Arnett, 2002; Fuligni & Tsai, 2014; Jensen & Arnett, 2012; Schwartz, Côté, & Arnett, 2005; Sharma & Sharma, 2010). To put simply, individuals are being increasingly presented with an ever-widening buffet of cultural values, norms and beliefs, which often do not fit within the traditional social structure present in their local societal environments (Schwartz et al., 2005).

In support of this perspective, studies examining the psychological impact of globalization have revealed an increasing global trend of identity confusion, particularly in non-Western countries where the contrast between one’s local culture and the exposure to global culture is particularly apparent (Doku, 2011; Sharma & Sharma, 2010). Such a trend is of great concern as research has shown that identity confusion and instability puts individuals at a high risk for experiencing both short-term psychological distress (such as anxiety and depression), as well as more long-term psychological dysfunctions (such as dissociative identity disorder and multiple personality disorder; Arnett, 2002; Doku, 2011; Schwartz, Klimstra, et al., 2011; Sharma & Sharma, 2010). It is, therefore, essential that psychologists endeavour to enhance our understanding of the dynamic interplay between culture and identity if we are to learn how to best support adaptive identity development in an increasingly pluralistic world.

Some of the leading research on this topic has come from the fields of acculturation and developmental psychology, both of which have long acknowledged the important role that one’s cultural environment plays in the development of his or her self-concept. The following sections will review the research from both of these perspectives, as they represent the two main approaches in examining the dynamic between culture and identity.

**The Acculturative Approach**
Many of psychology’s most profound insights concerning the interplay between culture and identity have been derived through observations of the migratory experience, where people are plunged into new cultural environments and are inundated with new opportunities and uncomfortable uncertainties (Ward, Bochner, & Furnham, 2001). Acculturation psychology has made use of this specific experience to examine the social and psychological changes that occur as a result of sustained intercultural contact (Sam & Berry, 2010). As the acculturation literature covers a wide range of such changes, this section will provide only a brief overview of acculturation research more broadly, and will primarily focus on acculturation research that has examined the relationship between intercultural contact and one’s self-concept.

**Berry’s Acculturation Orientations**

Much of the current acculturation research has drawn from John Berry’s model of ‘acculturative orientations’ which, broadly speaking, captures the most common strategies by which people adjust to new cultural environments (Berry, 1997; Sam & Berry, 2010). Within Berry’s framework, an acculturation orientation is determined by the degree to which the individual a) actively maintains his or her heritage culture and b) participates in the culture of the host society (Berry, 1997). As individuals can score both high and low on both of these dimensions, the resulting typology presents four possible acculturative orientations as illustrated by Figure 1.

The *assimilation* and *separation* orientations capture the tendency for individuals to participate in one culture more than the other, either in favour of the heritage culture (separation) or in favour of the host-culture (assimilation). The integration orientation is characterised by a relative balance between heritage and host culture participation, whereas the marginalization orientation is typified by a lack of cultural participation altogether, i.e.,
where the individual prefers not to engage with either cultural group (Berry, 1997; Berry, et al., 1992).

The acculturation research strongly suggests that integration is the most adaptive acculturative orientation as it has been consistently found to predict positive psychological and sociocultural outcomes. Conversely, the marginalization orientation is generally considered to be the least adaptive approach as it has often been found to relate to greater psychological distress and more sociocultural problems (Berry, Phinney, Sam, & Vedder, 2006; Phinney, Horenczyk, Liebkind, & Vedder, 2001).

It is important to note, however, that these orientations were originally premised on a *contact conceptualisation* of acculturation, whereby the framework aimed to capture an
individual’s attitude towards and contact with both cultural contexts (Berry et al., 2002). This conceptualisation has thus been frequently critiqued for its implicit ‘assumption’ that an individual who holds a positive attitude toward and participates in a given cultural environment also psychologically ‘identifies’ with that particular culture, conflating attitudes and behaviours with cognitive identifications (Boski, 2008; Snauwaert, Soenens, Vanbeselaere, & Boen, 2003; Ward & Kus, 2012).

Identity Dynamics during Acculturation

An alternative identification conceptualisation of acculturation was, thus, proposed which specifically addresses the impact of intercultural contact on one’s existing identifications (Boski, 2008; Ward & Kus, 2012). The identification model postulates that cross-cultural experiences often initiate a reorganisation of one’s current identifications as a means of adjusting to a new socio-cultural environment (Liebkind, 2006; Ward & Kus, 2012). The emergent pattern of identity outcomes reflect Berry’s acculturative orientations insofar that, during acculturation, individuals are faced with two key questions concerning the structure of their cultural identifications: the degree to which they a) maintain existing identifications with their heritage culture and b) the degree to which they identify with the national host culture. This model produces a similar matrix where individuals either identify with one of the two cultural contexts (assimilated identity, separated identity), disidentify with both cultures (diffuse identity) or incorporate both cultures into their overall self-concepts (an integrated or ‘bicultural’ identity; Liebkind, 2006; Phinney et al., 2001).

Bicultural Identity

The contact and identification frameworks converge in that the ‘integration orientation’ has been found to be positively associated with ‘bicultural identity formation,’ suggesting that those individuals who actively engage in both cultural contexts are more
likely to have internalized both cultural orientations within their self-concepts (Chen, Benet-Martínez, & Harris Bond, 2008). The two frameworks differ in that relatively equal participation in both cultural groups does not necessarily reflect an equal level of identification with both cultural contexts (Haritatos & Benet-Martínez, 2002; Nguyen & Benet-Martínez, 2007).

Research has shown that individuals who perceive their multiple cultural environments as being compatible and/or similar often go on to form well-integrated bicultural identities - as their perceptions enable them to successfully incorporate both cultural orientations into their personal self-concepts (Haritatos & Benet-Martínez, 2002; Nguyen & Benet-Martínez, 2007, 2012). Others however, who view their cultural environments as being contrasting and/or conflicting, struggle to integrate these cultural contexts within the self and often experience a conflict between the multiple guiding influences that come with each of the cultural orientations (Nguyen & Benet-Martinez, 2012). These conflicted individuals, although often outwardly capable of negotiating cultural demands (i.e., integrative orientation), experience an internal dissonance between the two contrasting parts of the self (Benet-Martínez & Haritatos, 2005). It thus becomes evident that categorically similar ‘identity structures (i.e., bicultural identity)’ can be psychologically experienced in different ways - where individuals vary in the extent to which they are able to integrate multiple cultural identifications into their self-concepts.

However, even when people do have similar bicultural experiences (i.e., integrated bicultural identification), they may have, nevertheless, arrived at this endpoint by different means. A qualitative study by Stuart and Ward (2011) suggests that some individuals achieve bicultural integration by ‘alternating’ between their two cultural frameworks – where the expression of each cultural identity varies according to the social context. Alternatively, their research also proposes that some individuals are able to ‘blend’ their two cultural
frameworks together into a ‘hybrid’ cultural identification. Unlike those who adopt the alternating strategy, blended individuals consider themselves to be a mixture of ‘both’ cultural contexts – resulting in a new identity configuration altogether (Stuart & Ward, 2011). Supporting the existence of the blending strategy, research with acculturating adolescents has shown that young people often ‘pick and choose’ elements from both their family heritage culture and the national dominant culture, where they are able to form a flexible identity structure that relates to both cultures but is not purely representative of either one (Fuligni & Tsai, 2014).

Acculturation and the Self-Concept

The acculturative perspective reveals that the dynamic between culture and the self-concept is subject to a variety of individual differences, where people not only vary in the degree to which they incorporate various cultural orientations within their self-concepts but the ways in which identity structures can be created and experienced.

However, despite these substantial individual differences in acculturation identity negotiations, the current research does not address the extent to which people are consciously guiding their identity dynamics and likewise, the extent to which resultant identity outcomes are a product of an unconscious internalisation of cultural contexts. Put simply – research concerning the degree to which people are aware of cultural influences on the self is absent in the acculturation literature. This lacuna can perhaps be explained by the fact that acculturation psychology often treats culture as an antecedent to changes in identity structures (Christopher & Bickhard, 2007; Y. Kashima et al., 2011; Lehman et al., 2004), and consequently, often fails to address the individual-level processes that determine how people arrive at different identity outcomes. We, therefore, turn to the developmental literature, which unlike the acculturative perspective, has been known for its more ‘process orientated’
approach and presents a more detailed account of the underlying mechanisms and dynamics of identity development.

The Developmental Perspective

Developmental psychology has long recognised the important role that culture plays throughout one’s identity formation. The next section will present a review of the foundational identity development literature and how it has been applied to ethnic identity research.

Foundational Identity Development Research

Much of the current identity development research has been founded on Erik Erikson’s Psychosocial Identity Theory (Erikson, 1968), which postulates that the road to a healthy and coherent adult identity is paved through two main processes – identity exploration and identity commitment (Côté & Levine, 2002). The identity exploration process is characterised by the questioning of one’s identity and the exploration of various identity options that are available to that individual at a given point in the life-span. Identity commitment, on the other hand, describes the process of selecting important identity options and making firm commitments about important decisions concerning one’s life course (Côté & Levine, 2002; Syed & Juang, 2014; Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004). Erikson argued that the actual content of one’s identity commitments (such as one’s choices concerning his or her occupation, religion or sexuality) is less important than the process of exploring various alternatives and resolving any disparities between one’s own self-image and the expectations of the wider community (Côté & Levine, 2002; Erikson, 1968; Umaña-Taylor & Shin, 2007).

Elaborating on Erikson’s work, Marcia, (1966, 1980, 1994) produced a bidimensional model of identity development that captures the degree to which a given individual has
engaged in both identity exploration and identity commitment, resulting in a typology of four identity statuses: 1) the diffuse identity status characterises individuals who have neither engaged in identity exploration nor have made firm identity commitments, 2) the foreclosed identity status typifies those individuals who have made firm identity commitments without having explored many alternatives, 3) the moratorium identity status characterises the active exploration of potential identity options and the reconciliation between possible choices and the self-image. And lastly, 4) the achievement identity status characterises individuals who have both explored various possibilities and have made stable identity commitments that best reflect their goals and desires (Côté & Levine, 1987; Marcia, 1966; Phinney, 1989).

To reach the achieved status, the individual is thought to have reconciled tensions between his or her individual identifications (those aspects considered to be unique to the self) and his or her relational identifications (the key social roles and relationships held with others), enabling the formation of a clear and coherent self-concept (Côté & Levine, 1987; Low, 1999). The achieved status is, therefore, often considered to be the most psychologically beneficial stage of identity development, where the individual is able to function effectively in a given social environment while satisfying his or her fundamental need for autonomy and distinctiveness (Luyckx, Goossens, & Soenens, 2006; Phinney, 1996).

Work by Crocetti and colleagues (2008) suggests, however, that the ‘achieved’ status is more of a transitional experience, as people often move back into moratorium when exposed to new identity alternatives. Such research supports the argument that identity formation is ‘cyclical’ in nature, where the formation of one’s self-concept is never ‘complete’ but exists within a continuous interaction between the individual and his or her socio-cultural environment (Stephen, Fraser, & Marcia, 1992). Despite the recognition of this interactive process, much of the earlier personal identity development research did not explicitly address the extent to which one’s culture goes on to become ‘part’ of one’s self-
concept (Yoder, 2000). Thus, in responding to this limitation, many developmental psychologists have sought out to directly investigate the role that one’s cultural heritage plays in the formation of one’s sense of self.

**Ethnic Identity Development**

Phinney (1996) laid the foundations in this field by exploring the influence of ethnicity on identity formation and the development of ethnic identity. In her work, Phinney endeavours to make a clear distinction between *ethnicity* and *ethnic identity*, emphasizing that one’s ascribed ethnic label does not necessarily mean that he or she personally identifies with the values, norms and traditions typical of his or her ethnic group (Phinney, 1996). From this perspective, *ethnicity* can be seen as a shared genetic and cultural heritage that is transmitted across generations, whereas *ethnic identity* encapsulates those aspects of one’s ethnic background which the individual has personally identified with and thus have become an integral component of his or her self-concept.

Phinney theorised that ethnic and general identity development follow similar trends, in the sense that ethnic identity formation entails a personal exploration of one’s ethnic heritage, followed by a selection of identity commitments that go on to form his or her ethnic-identity (Phinney, 1996). As ethnic identifications impact both personal and social identity formation, how an individual ‘feels’ about his or her ethnic group (i.e., affirmation) also shapes that person’s perception of his or her ethnic identity (Umaña-Taylor & Shin, 2007; Umaña-Taylor et al., 2004). Drawing from this theory, Phinney’s devised the Multigroup Ethnic Identity Measure (MEIM), a scale which combines levels of ethnic identity exploration, commitment and affirmation to produce a single score of ethnic identification (Phinney, 1992). On the whole, studies using MEIM have found that higher overall scores of ethnic identification are associated with positive psychological outcomes.
such as higher self-esteem, global well-being and lower distress (Phinney, 1992; Smith & Silva, 2011).

A critique of a MIEM, however, was that the single-score of ethnic identification could not adequately explain how individual aspects of ethnic identity formation (exploration, commitment or affirmation) independently influence psychological outcomes (Umaña-Taylor et al., 2004). Consequently, Umaña-Taylor and colleagues (2004) devised the Ethnic Identity Scale, a three-factor ethnic identity measure that generates an independent score for ethnic identity exploration, resolution (commitment) and affirmation.

Important findings from research using the Ethnic Identity Scale show that, much like general identity achievement, ethnic identity resolution appears to depend upon the active exploration of what one’s ethnicity means to him or her personally and the centrality ethnicity plays in that person’s life (Syed & Azmitia, 2009). Mirroring the results from personal identity research, work using the Ethnic Identity Scale shows that it is not the ‘content’ of one’s ethnic identity that seems to be of paramount importance, but rather that it is the process of personal exploration that enables people to develop a clear understanding of how their ethnicities have gone on to shape their personal self-concepts (Syed et al., 2013; Umaña-Taylor, Gonzales-backen, & Guimond, 2009).

**Culture and the Development of Self-Concept**

On the whole, it appears that identity development is founded on a cycle of exploration and commitment, which is true of both general identity and ethnic identity formation. The developmental perspective recognises the interactive nature of identity formation by showing that one’s self-concept is constructed through a continuous negotiation with his or her socio-cultural environment (Schwartz, Zamboanga, & Weisskirch, 2008).
More importantly, the developmental literature directly addresses the role of the individual in ethno-cultural identity formation by showing that the degree to which individuals engage in identity exploration has important implications regarding their ability to make firm identity commitments. Although this provides some level of explanation for the individual differences of ethno-cultural identity development, there is, once again, no explicit mention concerning the degree to which exploration and commitment are conscious or unconscious processes. Even though it is often stated that individuals actively explore their sociocultural environments and purposefully evaluate important identity commitments – no research to date has explicitly addressed the degree which individuals are consciously aware of the dynamic interaction between culture and their identity development.

**Gap in the Literature: Enculturation Awareness**

Our review of the developmental and acculturative literature has thus revealed an emergent paucity in the research concerning the degree to which ones enculturation (cultural acquisition during identity development) is a conscious or unconscious process. Indeed, neither field of research has explicitly examined the degree to which people are aware of the ways in which culture has come to shape their personal self-concepts.

The lack of attention towards this issue is perhaps due to the fact that much of the research is premised on the assumption that enculturation is predominately an unconscious process (Chiu, Morris, Hong, & Menon, 2000; Christopher & Bickhard, 2007; Kitayama et al., 2005; Nunes, 2003; Weinreich, 2009). Such an assumption is embedded in the most commonly used definition of enculturation, which describes the process of enculturation as a type of passive ‘cultural conditioning (Shimahara, 1970),’ whereby cultural information is unconsciously transmitted to the developing individual in his or her progression towards
becoming a functional member of society (Berry et al., 2006, 2002; Lehman et al., 2004; Sam, 2006; Weinreich, 2009).

Although it is entirely possible that, to a large extent, enculturation is a passive and unconscious process – it is, nevertheless, important to acknowledge that individuals do not conform entirely to cultural expectations, but often create new ways of seeing and being in the world (Frie, 2008; Timotijevic & Breakwell, 2000). As articulated by anthropologist Mary Goodman (1967) “…he [the enculturating individual] resists, evades, selects and experiments. He becomes a member of his society, but the process is a ‘creative becoming’” (p. 145). Goodman, thus, highlights the potential for individuals to be aware of cultural influences on the self, as they reflect on and search for possible identity options present in their cultural environments (Shimahara, 1970).

As it is well documented that explicit and implicit processes have vastly differential dynamics and outcomes (Kirsner, 1998), the absence of research on enculturation awareness may very well be a significant oversight. Indeed, it is possible that individuals who are more ‘conscious’ of the ways in which culture has influenced their self-perceptions may undertake a different approach to identity development (Uleman, Adil Saribay, & Gonzalez, 2008). For example, acculturating individuals who are aware of the dissonance between their multiple cultural reference points may be in a better position to resolve identity issues than those individuals who simply ‘react’ in the moment without being consciously aware that such a conflict even exists. Likewise, it is also possible that individuals who are ‘conscious’ of their identity exploration process (ethnic or otherwise), may be more proactive in seeking answers that help them make firmer identity commitments: whereas those individuals who are unaware that they are even ‘exploring’ at all may be more likely to get stuck in a ruminative cycle of identity questioning. Such speculations are in line with the body of research which has shown that more ‘creative’ and ‘active’ approaches to identity development are
associated with greater identity clarity and firmer identity commitments, and that more ‘avoidant’ approaches to identity development are associated with identity confusion and psychological distress (Berzonsky & Kuk, 2000; Berzonsky, 2003; Luyckx et al., 2008; Schwartz, 2005; Schwartz et al., 2013; Syed et al., 2013; Yoder, 2000).

In light of this gap in the literature (and its possible implications), it is of critical importance that research examines a) the degree to which individuals are aware of cultural influences on the self and b) whether variations in this awareness have significant implications for the way that people develop their personal self-concepts.

**Research to date**

Balanovic and Ward (2013) first addressed this issue by conducting a qualitative investigation that explored the ‘degree to which individuals have *consciously* considered and come to understand how culture has come to shape their identities.’ The investigation consisted of 11 one-on-one interviews with foreign-born Muslim women living in New Zealand. Using applied thematic analysis, the interviews revealed that a) participants varied in the degree to which they were aware of cultural influences on the self (here on in entitled ‘enculturation awareness,’), and b) those participants who expressed a higher level of enculturation awareness tended to report a higher sense of perceived control over these cultural influences (here on in referred to as ‘perceived agency,’). While the nature of qualitative research is such that the results cannot be generalized to wider populations, the implications of the investigation are nevertheless worthy of note, as the results suggest that individuals can be aware and actively engaged in the dynamic between their culture and their identity construction.

**The Current Investigation**
It is, therefore, the aim of the current research to expand on this qualitative investigation and construct an Enculturation Awareness Scale (EAS) that can empirically assess the degree to which individuals have consciously considered and come to understand how culture has shaped their personal self-concepts. In order to satisfy the objective, the current investigation will conduct two main studies. The purpose of the first study will be to construct the EAS, examine its factor structure and its relationship with a complication of selected criterion measures. The purpose of the second study will be to further extend the nomological network of the EAS by examining the relationship between enculturation awareness and theoretically related variables of perceived agency, empathy and positive psychological outcomes.

**Study I: Scale Construction and Validation**

The purpose of the first study was to construct an assessment tool of enculturation awareness that could effectively capture the degree to which individuals have both considered and come to understand cultural influences on the self. This goal was achieved in two parts: part one focused on the development of an initial Enculturation Awareness Scale (EAS) and the assessment of its construct validity by means of an Exploratory Factor Analysis. Following on from this, part two investigated the convergent and discriminant validity of the EAS by examining its relationship with selected identity exploration and clarity measures. Before delving into scale development however, the following section firstly describes the conceptualisation of enculturation awareness in more detail to better inform the reader of the scale construction process.

**Conceptualisation of Enculturation Awareness**

As already mentioned, enculturation awareness encompasses the degree to which individuals have consciously considered and come to understand how culture has shaped their personal self-concepts. Enculturation awareness is, therefore, situated at the intercept
between one’s culture and his or her self-concept (see Figure 2). It is important to note that, as enculturation awareness examines the influence of culture on one’s personal self-concept, it is expected that individuals with a high level enculturation awareness would express a clear understanding of how culture (a system of shared meaning) has shaped their *individual* identities (individually held values, beliefs and perceptions) as well as their *relational* identities (perceived roles and relationships that contextualise the expression of the individual self within a particular social environment).

*Figure 1:* The circle on the left represents culture, the circle on the right represents the self-concept, and an awareness of how two constructs overlap represents enculturation awareness – namely, those aspects of culture that have been integrated into one’s sense of self.

From this point of view, enculturation awareness is conceptualised as a ‘metacognitive’ form of self-awareness, where one is not only conscious of the *content* of his or her identifications (e.g., ‘I value freedom’), but is also aware of how the process of identification has been influenced by his or her cultural environment (e.g., ‘I value freedom because I identify with my American cultural heritage,’ Klein, 2012; Lewis, 1991). Referring
to the interactive process model – this form of self-awareness would be situated at a high ‘level of knowing,’ where the individual is able to make connections between abstract concepts such as the relationship between his or her culture and personal identifications (Christopher & Bickhard, 2007; Lewis, 1991). In line with this perspective, it is theorised that enculturation awareness is developed through a process of objective self-reflection, where individuals are able to become aware of and understand how culture has come to shape their personal self-concepts (Sedikides & Skowronski, 1995; Trapnell & Campbell, 1999).

It is important to emphasize that ‘self-awareness’ is often used interchangeably with terms such as ‘self-consciousness,’ ‘self-monitoring’ and ‘self-regulation,’ which describe notably different constructs (Hutchinson & Skinner, 2007; Silvia & Gendolla, 2001). Unlike our conceptualisation of self-awareness, these terms are often used to refer to a process of reflexive self-focus, whereby individuals compare their current self-concepts with an imagined ‘ideal’ self and evaluate the disparity between the two (Cheng, Govorun, & Chartrand, 2011; Higgins, 1987; Silvia & Gendolla, 2001; Silvia & Phillips, 2004). Such conceptualisations can therefore be seen as describing a more ‘subjective’ form of self-awareness, as the individuals in question are very much ‘in’ the content of their thoughts and are evaluating themselves through this lens (Christopher & Bickhard, 2007; Klein, 2012; Lewis, 1991). Further supporting this distinction, clinical studies have shown that the ability to perceive one’s internal states (‘I’ as the observing self) and the ability to think about one’s internal states (‘me’ the observed self) are two distinct processes as demonstrated by their selective impairment in cases of schizophrenia and parietal lobe damage (G. Dimaggio et al., 2009).

Thus, as enculturation awareness is founded on a non-evaluative, more objective form of self-awareness, the EAS items should be ‘neutral’ in content, where they do not insinuate “positive” or “negative” cultural influences but rather elicit objective observations concerning
cultural influences on one’s personal self-concept.

**Review of Existing Measures**

Enculturation awareness is conceptualised as lying on a spectrum of self-knowing, where at one end of the spectrum, the individual is just beginning to explore cultural influences on the self, while on the other end; the individual has gained a level of understanding of this influence. Thus, to better inform the item-generation process for the EAS, we reviewed the extant ‘identity exploration’ and ‘identity clarity’ research in order to determine which aspects of enculturation awareness could (and could not) be captured by existing psychological measures.

**Identity exploration measures.** Looking across the literature, it becomes evident that most of the existing identity exploration measures do not explicitly address how one’s cultural environment shapes his or her identity exploration. Moreover, the few measures that do address this dynamic do not assess the degree to which individuals are ‘conscious’ of the ways in which culture has influenced their personal self-concepts.

Take for example the Ethnic-Identity Exploration (EIE) subscale, which examines the degree to which an individual has taken active steps to learn more about his or her ethnic heritage for the purpose of developing a more clear and coherent ethnic identity (Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2009). The EIE subscale is similar to the EAS, in the sense that they both aim to capture an individual’s tendency to examine the dynamic between his or her ethnicity (a shared cultural heritage) and the development his or her self-concept. The two scales differ, however, insofar that the EIE subscale does not examine the degree to which one is *consciously aware* of which aspects of his or her ethnicity have been incorporated into his or her personal self-concept.

Personal or ‘general’ identity exploration measures on the other hand, assess the degree to which individuals have explored the various identity options present in the
sociocultural environment in the process of developing a committed personal identity. Specific examples include the Exploration in Depth and Exploration in Breadth subscales (taken from Dimensions of Identity Development Scale; Luyckx et al., 2008), which capture the degree to which individuals have explored personal identity options (such as goals, values and beliefs), both in terms of exploring the range of available options (breadth) as well as evaluating the degree to which these options represent the self (in-depth). Although it is embedded in the scale items that identity exploration is an interactive process between one’s socio-cultural environment and the development of the self-concept, the degree to which the individual’s personal self-concept is shaped by his or her cultural environment is not explicitly measured.

**Identity clarity measures.** The extant identity clarity measures have similar limitations as the identity exploration constructs insofar that they either do not address the role of culture in the development of a clear self-concept, and if they do, they once again fail to assess the degree to which individuals are aware of the ways in which culture has come to shape their identifications.

To elaborate, constructs such as Self-Concept Clarity, Identity Coherence, Identification with Commitment and Commitment Making, all capture the degree to which one has a ‘firm’ and ‘clear’ understanding of who they are and what they want in life. The Self-Concept Clarity Scale taps the degree to which ideas about the self a clearly defined (Campbell et al., 1996). Likewise, the Identity Coherence subscale taps the general perception of one’s identity as being clear and consistent across time (Rosenthal, Gurney, & Moore, 1981). The Identification with Commitment and Commitment Making subscales also capture a form of identity coherence as they examine the extent to which individuals have made important decisions about their identities (and how secure they feel in these decisions (Luyckx et al., 2008). None of these measures, however, address the degree to which one’s
culture is reflected in the development of a clear personal self-concept.

Usborne and Taylor’s (2010) Cultural-Identity Clarity Scale (CIC) addresses the influence of culture in respect to the development of one’s cultural-identity. The aim of the CIC is to assess the degree to which a person’s beliefs about his or her cultural group are clearly and confidently defined (Usborne & Taylor, 2010). The CIC does not, however, explicitly examine the degree to which these beliefs have gone on to shape one’s personal sense of self nor does it assess whether people are ‘aware’ that culture has had a significant influence on their personal self-concepts.

**Part One: Scale Construction**

During the process of scale construction, we focused on producing items that could capture what the aforementioned measures could not - namely, the degree to which people are consciously aware of the way in which their cultures have come to shape their personal self-concepts.

**Item-Generation**

Drawing from the previously conducted qualitative research on enculturation awareness with Muslim migrants (Balanovic & Ward, 2013), an initial item-pool was generated and refined, which proceeded as follows. Firstly, all of the data from the qualitative study were imputed into QSR International’s NVivo 10 software, a qualitative analytical programme that allowed us to carefully examine the specific words that were used to express presence or absence of enculturation awareness. To aid in this process, each interview was ranked from ‘high’ to ‘low’ in enculturation awareness, and subsequent word-frequency analyses produced visual representations of the most commonly used words in both these categories.

Such queries revealed that enculturation awareness was commonly described using words such as ‘culture,’ ‘think,’ ‘people,’ ‘difference’ and ‘change,’ which when examined in
context, captured the consideration of how culture shapes people, including the way that they think, how they act and what they believe and value. Moreover, large portions of the qualitative data described how cross-cultural contact had led to an increase in personal enculturation awareness. In the specific context of the research, many of the participants expressed that, as migrants, they felt that their understanding of how culture influences identity had greatly improved since moving to New Zealand and that this realisation had caused a shift in their perspectives of themselves and others.

To further examine this concept, a text word search was conducted on the word ‘perspective’ (including relevant synonymous such as ‘view’) to explore how worldviews and perspectives had been shaped by this cross-cultural experience (see Figure 2 for the visual representation).

Through a process of word-text searches and in-context analyses, seven broad categories emerged as being key components of enculturation awareness: how culture influences a) thinking 2) perspectives/worldviews 3) personal values 4) behaviour 5) identity 6) cultural reasons behind traditions and 7) cultural reasons behind social/cultural norms.

Once these broad categories were established, a large pool of 220 items was generated which focused on both the presence and absence of enculturation awareness concerning these key elements. By removing items that were repetitive, ambiguous, double-barrelled and/or misleading, the item-pool was subsequently reduced to a total of 52 items (Clark & Watson, 1995). These items were then presented to a group of colleagues whom had expertise in cultural psychology and psychological measurement. Through a process of collaborative analysis, the item-pool was further refined to a total of 22 items by removing or collapsing item-topics due to the following theoretical considerations.
Figure 3: A visual representation of the pattern of dialogue using the word ‘view,’ illustrating how individual’s felt that their perceptions had been influenced by intercultural contact.
Firstly, the ‘traditions’ and ‘social norm’ categories were combined as they were seen as largely sharing the same meanings. Secondly, all of the items that were ‘other’ focused (items that probed for how other people have been shaped by their cultures) were discarded. This decision was based on the premise that the examination of how others are influenced by culture may be a mechanism that aids the in development of one’s own enculturation awareness (as is supported by research on self-awareness and theory of mind; G. Dimaggio, Lysaker, Carcione, Nicolò, & Semerari, 2008), but it does not necessarily reflect one’s personal level of enculturation awareness at the time of measurement.

As a final step, the remaining item-pool was adjusted to ensure a balance of positively and negatively phrased items, followed by the selection of an introductory paragraph as well as an appropriate response format (see methods section for full details, p. 33) – completing the construction of the EAS.

**Part Two: Scale Validation**

**Criterion Measures**

**Identity exploration.** As enculturation awareness involves a process of self-exploration concerning the influence of culture on one’s self-concept, the following identity exploration constructs were selected as appropriate criterion measures to examine the degree to which enculturation awareness reflects a process of identity exploration. Firstly, we anticipated a positive association between the EAS and the EIE subscale as they both capture an exploration of one’s cultural environment for the purposes of developing a stable sense of self (Umaña-Taylor, Yazedjian, et al., 2009). Secondly, it was also predicted that the EAS would be positively associated with general identity exploration measures (i.e., the Exploration in Depth and Exploration in Breadth subscales; Luyckx et al., 2008) as these represent the exploration and examination of one’s personal identifications (capturing part of the process of enculturation awareness development). Likewise, it is predicted that the EAS
would be negatively associated with the Ruminative Exploration subscale, a measure that
captures a more passive and evaluative approach to identity exploration (Luyckx et al., 2008).

The strength of all of the relationships was hypothesized to fall within the small to
medium range due to the fact that a) the general-identity exploration measures do not address
the role of culture in identity exploration and b) the cultural-identity measures do not look at
the degree to which identity exploration is a ‘conscious’ negotiation between one’s social
environment and personal perceptions.

Identity Clarity Criterion Measures

A high level of enculturation awareness is expressed by a clear understanding of how
one’s culture has come to shape his or her personal self-concept. As such, selected identity
clarity measures were included to examine whether the EAS is associated with greater
identity clarity and cohesion. These measures included the Cultural-Identity Clarity Scale
(Usborne & Taylor, 2010), the Self-Concept Clarity Scale (Campbell et al., 1996), Erikson’s
Identity Coherence/Confusion subscale (Rosenthal et al., 1981), and the Identity
Commitment and Commitment Making subscales (Luyckx et al., 2008), which, as already
mentioned, all capture various aspects of a clear and coherent self-concept. Once again,
however, the strength of these associations was predicted to fall between the small to medium
range (Pearson’s correlation between .10 and .30; Cohen, 1992) as the general-identity clarity
measures do not address the role of culture in the development of a clear self-concept,
whereas, the cultural-identity measure does not address the degree to which said cultural
influences are consciously known by the individual.

Finally, in keeping with the aim of developing an enculturation awareness measure
that captures objective, ‘non-judgemental’ observations concerning cultures influence on the
self-concept, it was expected that the EAS would not be significantly associated with the
shortened Social Desirability Scale (Reynolds, 1982), which assesses a participant’s tendency to ‘fake good’ in his or her responses.

In summary, the construct validity of the EAS will be demonstrated by the following:

1) Significant small to medium positive correlations between the EAS and identity exploration measures (the Ethnic-Identity Exploration subscale, the Exploration in Depth subscale and the Exploration in Breadth subscale).
2) A significant small to medium negative correlation between the EAS and the Ruminative Identity Exploration subscale.
3) Significant small to medium positive correlations between the EAS and identity clarity measures (the Cultural Identity Clarity Scale, the Self-concept Clarity Scale, the Identity Commitment subscale, the Commitment Making subscale and the Identity Coherence/Confusion subscale).
4) A non-significant correlation between the EAS and the shortened Social Desirability Scale.

**Methods**

**Procedure**

Selected measures were formed into an anonymous online survey that was approved by the Victoria University School of Psychology Human Ethics Committee. The survey link was disseminated onto various online forums (e.g., Facebook, Twitter, Reddit) inviting any individual to participate who was both a) living in New Zealand and b) at least 18 years old. Additional effort was put towards recruiting participants from ethnic and cultural community groups to ensure that ethnic-minority perspectives were well represented in the sample. To achieve this, various organisations were contacted (e.g., The Office of Ethnic Affairs, the Federation of Multicultural councils) – who assisted in the dissemination of the survey to their respective audiences. All participants were informed that their participation was
completely anonymous, voluntary and that they could stop at any time. Furthermore, all participants were provided with an information sheet at the beginning of the survey and a debriefing sheet upon completion.

**Participants**

Out of the 348 participants that met the inclusion criteria, 224 were used for subsequent factor analyses, eliminating all those participants who had not completed approximately 90% of the EAS. The sample was further reduced for all validity assessments, removing those participants who had not completed approximately 80% of the full survey, leaving a total of 207 participants (female =142, male = 65) with an age range of 18-77 ($M=40.19$, $SD =16.35$). Sixty-four percent of the participants were New Zealand born with the remaining 36% originating from a variety of countries from across Europe, Asia and the Pacific. Although the ethnic descriptions of the participants were diverse, the majority of the sample identified as New Zealand European/Pakeha ($n = 148$). The remainder of the sample was made up of smaller ethnic groups that fell into larger geographic categories such as NZ Maori/Tangata Whenua ($n = 16$), European ($n = 43$, e.g., French, German, English, Polish, Serbian, Dutch), Asian ($n = 18$, e.g., Chinese, Indian) and Pasifika ($n = 21$ e.g., Tongan, Fijian, Cook Island Maori).\(^1\)

**Materials**

The final survey included the initial 22-item EAS as well as identity exploration measures (Cultural-Identity Exploration, Exploration in Depth, Exploration in Breadth and the Ruminative Exploration), identity clarity measures (Cultural-Identity Clarity, Self-Concept Clarity and Identity Coherence/Confusion) and identity commitment measures (Identification with Commitment and Commitment Making). Alongside the criterion

\(^1\) All participants indicated at least a ‘good’ level of global English language proficiency, thus lending confidence that the subsequent results were not significantly influenced by language barriers
measures, demographic and background information was also collected which included: age, gender, country of origin, residential status, ethnicity and English Language Proficiency. Each of the measures are described as follows:

**The Enculturation Awareness Scale (EAS):** The initial EAS consisted of 22 items that were designed to capture the degree to which individuals had consciously considered and come to understand how culture has shaped their identities. Example items include “I have thought about how my values have been shaped by my culture” and “I understand how my thinking has been shaped by my culture” to which participants respond to using a 7-point Likert scale, ranging from (1), strongly disagree to (7) strongly agree (see appendix A for the full initial scale), with higher scores on the EAS indicating a greater level of enculturation awareness. Furthermore, the beginning of the measure included a prompt that outlined how culture is defined in the context of the research, which read as follows:

Culture is something that we all have but experience in different ways. The following survey therefore assumes a broad definition of ‘culture,’ which includes: ethnicity, nationality, continental history, religion, spirituality and generational group.

The inclusion of this definition ensured that any obtained responses on the EAS reflected similar conceptualisations of ‘culture’ and were not exclusively focused on ‘ethnic or national’ groups (as is the case in much research; Lehman, Chiu, & Schaller, 2004).

**The Self-Concept Clarity Scale (SCC):** The SCC is a 12-item unidimensional measure that assesses the extent to which beliefs about the self are clearly defined, internally consistent, and stable (Campbell et al., 1996). Participants respond to items such as “My beliefs about myself often conflict with one another” by using a 5-point Likert scale, which ranges from (1) strongly disagree to (5) strongly agree so that higher scores indicate greater levels of identity clarity. The SCC has demonstrated sound internal consistency (average α}
The Cultural-Identity Clarity Scale (CIC): Drawing from the SCC, the CIC is an 8-item measure that captures “the extent to which beliefs about one’s *cultural group* are perceived to be clearly and confidently defined (Usborne & Taylor, 2010, p. 883).” Participants respond to items such as “Sometimes I think I know other cultural groups better than I know my group” using a 11-point Likert scale which ranges from (0) strongly disagree to (10) strongly agree, with higher scores indicating greater levels of cultural-identity clarity. The CIC scale has demonstrated adequate internal consistency with a Cronbach alpha of 0.86 (Usborne & Taylor, 2010).

The Ethnic-Identity Exploration subscale (EIE): Taken from the 17-item Ethnic-Identity Scale - ‘Ethnic-Identity Exploration’ is a 7-item subscale that captures the process of questioning and seeking information about one’s ethnic identity (Umaña-Taylor et al., 2004). Participants respond to items such as “I have participated in activities that have exposed me to my ethnicity” by using a 4-point Likert scale which ranges from (1) ‘does not describe me at all’ to (4) ‘describes me very well” with higher scores indicating greater ethnic identity exploration. The EIE subscale has demonstrated good internal consistency ($\alpha = 0.91$) and has been found to load as an independent factor on the Ethnic Identity Scale – demonstrating its utility as an independent subscale (Umaña-Taylor, Yazedjian, et al., 2009). However, as the context of the current research aimed to probe at broader concept of ‘culture,’ the EIE scale was adapted to capture ‘cultural identity exploration (CIE)’ by replacing the words ‘ethnic/ethnicity’ with ‘culture/cultural’ in each item - e.g., “I have participated in activities that have exposed me to my culture.”

The Dimensions of Identity Development Scale (DIDS): The DIDS is a 25-item measure that assesses at which stage of identity development an individual is likely to be at
by examining the following five factors: 1) Exploration in Breadth (5 items) - the degree to which an individual has considered a broad range of goals, values and beliefs before making identity commitments e.g., “Think about the direction I want to take in my life.” 2) Exploration in Depth (5 items) - the degree to which individuals have evaluated (and re-evaluated) existing identity choices e.g., “Think about the future plans I have made.” 3) Ruminative Exploration (5 items) – the extent to which individuals engage in a cyclical form of identity exploration, whereby they chronically analyse and (re) evaluate identity options e.g., “Doubtful about what I really want to achieve in life.” 4) Commitment making (5 items) – the degree to which the individual has made choices about important identity-relevant issues e.g., “Decided on the direction I want to follow in life,” and 5) Identification with Commitment (5 items) – the degree to which individuals feel secure and satisfied with existing identity commitments they have made e.g., “Plans for the future offer me a sense of security.” Participants respond to each item on a 5-point Likert scale, which ranges from (1) strongly disagree to (5) strongly agree. Higher scores on each subscale indicate greater levels of the respective factors. Each subscale has demonstrated sound internal consistency with Cronbach alphas ranging from .80 to .86 (Luyckx et al., 2008).

The Identity Coherence/Confusion subscale (ICC): Taken from the Erikson Psycho-Social Inventory (EPSI; sourced from Rosenthal et al., 1981), the ICC subscale is comprised of 12-items that capture general feelings of ‘synthesis, clarity, purpose, authenticity and satisfaction with the self,” (Syed et al., 2013, p. 143). Participants respond to items such as “I’ve got it together” and “I know what kind of person I am,” using a 4-point Likert scale ranging from (1) hardly ever true to (4) almost always true, with higher scores indicating a more coherent and less confused identity. Studies using the ICC have found it to be highly reliable with a Cronbach alpha of .88 (Syed et al., 2013). As the subscale is
comprised of two main components – identity coherence (6 items) and identity confusion (6 items), identity confusion items were reversed to give an overall identity coherence score.

The shortened Social Desirability Scale (SD): The shortened Social Desirability Scale (SD) is a 13-item construct that assesses the degree to which people respond in socially desirable ways (Reynolds, 1982). Participants are asked to respond to items such as “There have been occasions when I took advantage of someone,” using a dichotomous true-false response format. The SD items are intentionally loaded in such a way to encourage culturally appropriate answers (at the cost of telling the truth), and, therefore, capture the tendency for individuals to ‘fake good’ in their responses (Crowne & Marlowe, 1960). The SD has proven to be a useful tool in assessing discriminant validity for the purposes of scale construction and has demonstrated sound internal consistency (Kuder Richardson = .88) and test-retest reliability over a one month period ($r = .89$; Ward, Stuart, & Kus, 2011).

The English Language Proficiency Scale: The ELP is a conventionally used 4-item measure that assesses people’s self-evaluations of their English language abilities in areas of reading, writing, speaking and comprehension (Zheng & Berry, 1991). Participants respond to the prompt “Please rate your level of English language proficiency in the following areas” using a 5-point Likert scale ranging from (1) poor to (5) excellent, with higher total scores indicating greater global English language proficiency. Note that this scale was preceded by a question that asked participants whether or not English was their first language, to which they respond using a dichotomous ‘yes’ and ‘no’ response format. Only those participants who indicated ‘no’ were prompted to complete the English Language proficiency measure.

Results

Analysis Design

The objective of the first study was to develop an enculturation measure that would be able to quantitatively assess the degree to which people are conscious of the ways in which
culture has shaped their personal self-concepts. To satisfy this objective, the EAS was constructed by drawing from the previous qualitative research on enculturation awareness as well as other relevant literature. In order to examine the reliability and validity of the EAS, the initial item-pool was subjected to a series of statistical checks and analyses. This included examining whether the scale had satisfactory item variance and item-total correlations as well as the assessment the factor structure of the construct as a whole. In producing a measure that is both comprehensive and parsimonious, the scale items were assessed for both explanatory breadth as well as repetition (Clark & Watson, 1995). Using a balance of statistical and content analyses, the item-pool was reduced to form a scale that best conformed to statistical quality checks as well as being theoretically consistent with enculturation awareness as a psychological construct.

**Analytical Procedure**

**Data-preparation.** Using the partitioned EFA sample of 224 participants, the first analytical step was to examine response means for extreme scores. Only one suspiciously low response mean was found, with item 22 showing a mean score of 2.83. The item was kept at this stage but this scoring information was taken into consideration in further analyses. No other items exceeded an average of 5.76, which suggested that no items needed to be discarded for ceiling effects.

**EFA.** Using IBM SPSS 19, a listwise principle components analysis was conducted to explore the factor structure of the EAS with an oblimin rotation (as factors were expected to be related). Notably, KMO = .94 and Bartlett’s Test chi-square (231) = 3039.92 \( p < .001 \) indicated that the data were suitable for factor analyses. Three factors with eigenvalues of more than one emerged (the pattern of item loadings are presented in Table 1). The results show that out of the full 22 items, 20 items (91%) loaded onto the first factor (eigenvalue of 10.48, explaining 47.67% of the variance), 16 loaded onto the second factor (eigenvalue 2.55,
explaining 11.60% of the variance) and only two of the items loaded onto the third factor (eigenvalue 1.31, explaining 5.98% variance).

**Scale refinement.** A Monte Carlo PCA parallel analysis was conducted to examine the likelihood of three factors emerging due to random chance (Worthington & Whittaker, 2006). The results from this analysis specified that for a sample of 224 participants, an eigenvalue of more than 1.436 was required for a reliable third factor, which was not satisfied by the current data. Further questioning the reliability of the third factor, the two items which loaded onto this factor (items 21 and 22; see Table 1) were both tapping a behavioural aspect of enculturation awareness (e.g., “I often perform cultural acts without thinking about the reasons behind them,” reverse coded), which suggests that these items were not capturing enculturation awareness per se, but rather, a behavioural *expression* of it. Based on these statistical and theoretical considerations, the two behavioural items were discarded, which resulted in the disappearance of the third factor.

Following on from this, seven additional items showed significant cross-loadings across the two main factors (see Table 1) – all of which exceeded the recommended cross-loading cut-off of .32 (Worthington & Whittaker, 2006). Notably, all seven of these positively phrased items loaded in the negative direction on the second factor. Thus, one interpretation of this finding is that these positively phrased items were ‘contradicting’ the negatively phrased items (which we remind the reader were reverse scored) on the second factor. In light of these cross-loadings and conceptual considerations, the seven problematic items were removed from the measure, resulting in a remaining 13-item scale, which presented satisfactory loadings, ranging from .72 - .92 (refer to Table 1 for refined scale factor loadings).
**Table 1 - Exploratory factor analysis item loadings.**

<table>
<thead>
<tr>
<th>Items</th>
<th>Full Scale Factor Loadings</th>
<th>Refined Scale Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor Loadings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I have thought about how my values have been shaped by my culture</td>
<td>.79</td>
<td>.02</td>
</tr>
<tr>
<td>I have thought about how my culture has shaped the way I behave</td>
<td>.81</td>
<td>.06</td>
</tr>
<tr>
<td>I have thought about how my perspective of the world has been shaped by my culture</td>
<td>.89</td>
<td>.05</td>
</tr>
<tr>
<td>I have considered how my culture has shaped the way I think</td>
<td>.88</td>
<td>.03</td>
</tr>
<tr>
<td>I have thought about how my identity has been shaped by my culture</td>
<td>.84</td>
<td>.01</td>
</tr>
<tr>
<td>I am unsure in what ways my culture has influenced my perspective of the world (R)</td>
<td>.04</td>
<td>.81</td>
</tr>
<tr>
<td>I am unsure in what ways my culture has influenced the way I think (R)</td>
<td>.05</td>
<td>.82</td>
</tr>
<tr>
<td>It’s hard for me to say how my values have been influenced by my culture (R)</td>
<td>-.03</td>
<td>.81</td>
</tr>
<tr>
<td>It’s hard for me to say how my culture has shaped the way I think (R)</td>
<td>.04</td>
<td>.89</td>
</tr>
<tr>
<td>It’s difficult for me to say how my identity has been shaped by my culture (R)</td>
<td>-.11</td>
<td>.80</td>
</tr>
<tr>
<td>I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture (R)</td>
<td>-.01</td>
<td>.77</td>
</tr>
<tr>
<td>I am unsure in what way my values have been influenced by my culture (R)</td>
<td>-.06</td>
<td>.82</td>
</tr>
<tr>
<td>I am unsure how my culture has influenced the way I interact with others (R)</td>
<td>-.04</td>
<td>.75</td>
</tr>
<tr>
<td>I understand how my culture guides my behaviour</td>
<td>.48</td>
<td>-.41</td>
</tr>
<tr>
<td>I have considered how my view of what is ‘right and ‘wrong’ has been shaped by my culture</td>
<td>.62</td>
<td>-.30</td>
</tr>
<tr>
<td>I am aware of the ways in which my culture has shaped how I interact with others</td>
<td>.78</td>
<td>-.60</td>
</tr>
<tr>
<td>I am aware of how my view of the world has been shaped by my culture</td>
<td>.64</td>
<td>-.44</td>
</tr>
<tr>
<td>I am aware of the ways in which my culture has shaped my values</td>
<td>.81</td>
<td>-.68</td>
</tr>
<tr>
<td>I know how my culture has shaped my identity</td>
<td>.57</td>
<td>-.34</td>
</tr>
<tr>
<td>I understand how my thinking has been shaped by my culture</td>
<td>.71</td>
<td>-.62</td>
</tr>
<tr>
<td>I occasionally perform cultural practices without thinking about the reasons behind them (R)</td>
<td>.18</td>
<td>-.04</td>
</tr>
<tr>
<td>I sometimes participate in my cultural traditions without really understanding the reasons behind them (R)</td>
<td>-.00</td>
<td>.23</td>
</tr>
</tbody>
</table>

*Note: Bolded figures highlight high factor loadings. Italicized figures highlight cross-loadings of above .30.*
After the removal of these nine items, the remaining 13 items loaded onto two factors with the first factor showing an eigenvalue 6.97, accounting for 53.63% of the variance, and the second factor showing an eigenvalue of 2.07, accounting for 15.90% of the variance. The refinement of the scale increased the total variance explained from 65.25% to 69.63%. What is more, Table 1 shows that the emergent factors appear to fall into two broad categories: ‘enculturation consideration’ and ‘enculturation comprehension.’

The enculturation consideration factor is made up of items that assess the degree to which individuals have thought about how culture has influenced their self-concepts e.g., “I have considered how my culture has shaped the way I think.” The enculturation comprehension factor, however, consists of items that assess the degree to which individuals understand how culture has influenced their self-concepts, e.g., “I am unsure in what way my values have been influenced by my culture” (reverse coded). This distinction between these factors is rationally consistent with the conceptualisation of enculturation awareness as encompassing a combination of self-reflection and self-knowing, where individuals have both explored and come to understand how culture has influenced their personal self-concepts.

The item-total correlations of the retained 13 items are presented in Table 2. The overall EAS demonstrated good internal consistency with a Cronbach alpha of .93. This was also the case for the Enculturation Consideration and Enculturation Comprehension subscales, both of which reached alphas of above .90. Furthermore, the component correlation of .51, as well as the mean inter-item correlation of .48, indicate that the two scales can be used combined into an overall enculturation awareness measure (i.e., the EAS). Scores on the EAS are calculated by summing scores on each item (reversing items 2, 4, 6, 8, 9, 11, 12, and 13), with higher scores indicating greater enculturation awareness.

**Data-Imputation.** Once the scale refinement process was complete, the shortened version of the scale was ready to be subjected to construct validity assessments - where
relationships between the EAS and selected criterion measures were to be examined. However, as a small percentage of missing data remained across the validation sample of 207 responses, an expectation maximization analysis was conducted to examine whether the data-set was suitable for imputation of missing values. The results from this analysis showed that there was no significant difference between real score means and imputed score means (Little’s MCAR test: chi-square = 6.931; df = 8; ns) where a total 10 data-points were replaced. Based on this non-significant difference, it was considered acceptable to impute missing data values and conduct subsequent analyses using the imputed data-set.

### Table 2 – Descriptive statistics of the EAS.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Item-Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have thought about how my values have been shaped by my culture</td>
<td>5.71</td>
<td>1.236</td>
<td>.44</td>
</tr>
<tr>
<td>2</td>
<td>I am unsure in what ways my culture has influenced my perspective of the world</td>
<td>3.04</td>
<td>1.534</td>
<td>.47</td>
</tr>
<tr>
<td>3</td>
<td>I have thought about how my culture has shaped the way I behave</td>
<td>5.76</td>
<td>1.128</td>
<td>.42</td>
</tr>
<tr>
<td>4</td>
<td>I am unsure how my culture has influenced the way I interact with others</td>
<td>3.29</td>
<td>1.558</td>
<td>.48</td>
</tr>
<tr>
<td>5</td>
<td>I have thought about how my perspective of the world has been shaped by my culture</td>
<td>5.57</td>
<td>1.216</td>
<td>.45</td>
</tr>
<tr>
<td>6</td>
<td>I am unsure in what ways my culture has influenced the way I think</td>
<td>3.10</td>
<td>1.458</td>
<td>.46</td>
</tr>
<tr>
<td>7</td>
<td>I have considered how my culture has shaped the way I think</td>
<td>5.50</td>
<td>1.186</td>
<td>.48</td>
</tr>
<tr>
<td>8</td>
<td>It’s hard for me to say how my values have been influenced by my culture</td>
<td>3.30</td>
<td>1.566</td>
<td>.50</td>
</tr>
<tr>
<td>9</td>
<td>I am unsure in what way my values have been influenced by my culture</td>
<td>2.99</td>
<td>1.404</td>
<td>.52</td>
</tr>
<tr>
<td>10</td>
<td>I have thought about how my identity has been shaped by my culture</td>
<td>5.54</td>
<td>1.231</td>
<td>.47</td>
</tr>
<tr>
<td>11</td>
<td>It’s hard for me to say how my culture has shaped the way I think.</td>
<td>3.17</td>
<td>1.566</td>
<td>.51</td>
</tr>
<tr>
<td>12</td>
<td>It’s difficult for me to say how my identity has been shaped by my culture</td>
<td>3.11</td>
<td>1.567</td>
<td>.53</td>
</tr>
<tr>
<td>13</td>
<td>I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture</td>
<td>2.83</td>
<td>1.414</td>
<td>.46</td>
</tr>
</tbody>
</table>

**Scale quality checks.** Table 3 reports the psychometric properties of the EAS alongside the selected criterion measures. As can be seen in Table 3, most of the measures demonstrate adequate internal consistency scores with 13 out of 15 of the constructs reaching
an alpha of over .70. The two constructs that showed below average internal consistency scores were the Exploration in Depth subscale (.61) and shortened Social Desirability Scale (.54). Further examinations revealed that the mean inter-item correlation of the Exploration in Depth scale came to .34, falling within Briggs and Cheek’s (1986) recommended range .20 and .40 for a one-factor measure. The shortened Social Desirability scale, however, did not meet this criterion with an inter-item correlation of (.13). Overall, the psychometric properties of all the measures demonstrate their suitability for subsequent analyses, with the exception of the social desirability measure, the results from which should be interpreted with caution.

<table>
<thead>
<tr>
<th>Table 3 - Psychometric properties of the EAS and criterion measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
</tr>
<tr>
<td>Enculturation Awareness</td>
</tr>
<tr>
<td>- Enculturation Consideration</td>
</tr>
<tr>
<td>- Enculturation Comprehension</td>
</tr>
<tr>
<td>Cultural Identity Clarity</td>
</tr>
<tr>
<td>Cultural Identity Exploration</td>
</tr>
<tr>
<td>Identity Coherence/Confusion</td>
</tr>
<tr>
<td>Exploration in Depth</td>
</tr>
<tr>
<td>Exploration in Breadth</td>
</tr>
<tr>
<td>Ruminative Exploration</td>
</tr>
<tr>
<td>Commitment Making</td>
</tr>
<tr>
<td>Identification with Commitment</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
</tr>
<tr>
<td>Social Desirability</td>
</tr>
<tr>
<td>English Language Proficiency</td>
</tr>
</tbody>
</table>

Validity Assessments

Tables 4, 5 and 6 present correlation matrices between the EAS and the criterion measures. Although our initial hypotheses predicted relationships between a single measure of enculturation awareness and the selected constructs, the two-factor solution of the EAS
necessitates that we evaluate each relationship individually by subscale, examining the correlations between each criterion measure and the Enculturation Consideration and Enculturation Comprehension subscales respectively. Furthermore, by examining the results by subscale, we are able to explain why many of our hypotheses were only partially confirmed by the data and how the differential relationships across the two subscales add to the construct validity of the EAS.

Table 4 - Correlation matrix between the EAS and identity exploration measures.

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EAS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. E-Con</td>
<td>.80**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. E-Com</td>
<td>.95**</td>
<td>.57**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CIE</td>
<td>.52**</td>
<td>.53**</td>
<td>.44**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ex-Breadth</td>
<td>.03</td>
<td>.15**</td>
<td>-.03</td>
<td>-.10</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ex-Depth</td>
<td>-.12</td>
<td>-.02</td>
<td>-.16*</td>
<td>.03</td>
<td>.58**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Ex-Rumin</td>
<td>-.19**</td>
<td>-.02</td>
<td>-.25**</td>
<td>-.09</td>
<td>.30**</td>
<td>.47**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: $N = 207$, EAS = Enculturation Awareness Scale, E-Con = Enculturation Consideration subscale, E-Com = Enculturation Comprehension subscale, CIE = Cultural Identity Exploration Scale, Ex-Breadth = Exploration in Breadth subscale, Ex-Depth = Exploration in Depth subscale, Ex-Rumination = Ruminative Exploration, * $p < .05$, ** $p < .01$

Identity exploration measures. The predicted relationships between the EAS and identity exploration measures (Table 4) were partially supported by the data, with the results showing that the EAS was significantly, positively associated with the Cultural Identity Exploration subscale ($r = .52$, $p < .01$) and significantly, negatively associated with the Ruminative Exploration subscale ($r = -.19$, $p < .01$). However, the results also show that only the Cultural-Identity Exploration subscale was significantly positively correlated with both of the EAS subscales (Enculturation Consideration, $r = .53$, $p < .01$, Enculturation Comprehension, $r = .44$, $p < .01$). The remainder of the exploration measures were differentially related to the two subscales. Indeed, the results show that exploration in breadth was only significantly positively correlated with the Enculturation Consideration subscale ($r = .15$, $p < .01$), whereas ruminative exploration and exploration in breadth were only significantly, negatively correlated with the enculturation comprehension subscale ($r =$
On the whole, these results indicate that the consideration of cultural influences on the self is positively associated with adaptive identity exploration while being unrelated to exploration in depth and ruminative exploration. The results also indicate that understanding cultural influences on the self was negatively associated with exploration in depth and ruminative exploration.

**Table 5 - Correlation matrix between the EAS and identity clarity measures.**

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EAS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. EA-Con</td>
<td></td>
<td>.80**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. EA-Com</td>
<td>.95**</td>
<td>.57**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CIC</td>
<td>.33**</td>
<td>.10</td>
<td>.40**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. IDCC</td>
<td>.27**</td>
<td>.10</td>
<td>.32**</td>
<td>.45**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. SCC</td>
<td>.30**</td>
<td>.09</td>
<td>.36**</td>
<td>.61**</td>
<td>.71**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note:* N = 207, EAS = Enculturation Awareness Scale, E-Con = Enculturation Comprehension subscale, CIE = Cultural Identity Clarity Scale, IDCC = Identity Coherence/Confusion subscale, SCC = Self-Concept Clarity Scale, *p < .05. **p < .01.

**Identity clarity measures.** The predicted relationships between the EAS and identity clarity measures (Table 5) were also partially confirmed by the data. Firstly, the emergent results supported our initial predictions, with the EAS being significantly positively correlated with the Cultural-Identity Clarity Scale (r = .33, *p < .01), the Self-Concept Clarity Scale (r = .30, *p < .01) and the Identity Coherence subscale (r = .27, *p < .01). When examining the results by subscale, however, only the Enculturation Comprehension subscale showed a significant positive correlation with measures of Cultural-Identity Clarity (r = .40 *p < .01), Self-Concept Clarity (r = .36 *p < .01) and Identity Coherence (r = .32 *p < .01). The Enculturation Consideration subscale however, was not significantly related to any of the identity clarity measures. These relationships indicate that, understanding how culture has influenced one’s self-concept is related to more clear and coherent overall identity while also showing that identity clarity is unrelated to the consideration of cultural influences on the self.
Identity commitment measures. The hypothesised relationships between the EAS and selected commitment measures (Table 6) were also partially confirmed by the current data. Once again, the emergent results support our initial predictions, as the EAS was significantly positively correlated with the Identification with Commitment ($r = .15, p < .01$) and Commitment Making ($r = .21, p < .01$) subscales.

Table 6 - Correlation matrix between the EAS and Identity Commitment Measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EAS</td>
<td>-</td>
<td>.80**</td>
<td>-</td>
<td>.57**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2. E-Con</td>
<td></td>
<td></td>
<td>.95**</td>
<td></td>
<td>.15*</td>
<td></td>
</tr>
<tr>
<td>3. E-Com</td>
<td></td>
<td></td>
<td>.57**</td>
<td>.19**</td>
<td>.21**</td>
<td></td>
</tr>
<tr>
<td>4. IDC</td>
<td></td>
<td>.03</td>
<td></td>
<td>.25**</td>
<td>.67**</td>
<td></td>
</tr>
<tr>
<td>5. CM</td>
<td></td>
<td>.07</td>
<td>.21**</td>
<td></td>
<td>.67**</td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 207, EAS = Enculturation Awareness Scale, EA-Con = EA-consideration subscale, EA-Com = comprehension subscale, IDC = Identification with Commitment, CM = Commitment Making. * $p < .05$. ** $p < .01$.

Mirroring the identity clarity pattern of results, however, only the Enculturation Comprehension subscale was significantly positively correlated with the Identity Commitment ($r = .19, p < .01$) and Commitment Making ($r = .25, p < .01$) subscales.

Likewise, no significant relationship was found between the Enculturation Consideration subscale and the Identity Commitment and Commitment Making subscales. These results indicate that understanding how culture has come to shape one’s personal identity is positively related to the making of firmer commitments, while the mere consideration of cultural influences on the self-concept is not associated with identity commitment.

Lastly, a non-significant correlation was found between the EAS and the Social Desirability measure ($r = .06, ns$), as well as the two EAS subscales (enculturation consideration, $r = -.04, ns$; enculturation comprehension, $r = .10, ns$; see appendix D). In light of this finding, we are inclined to view the above relationships as not being significantly influenced by a tendency to ‘fake good’ in responding.

Although no predictions were made about the factor structure of the EAS (and hence possible subscale relationships), the nature of the emergent correlations is theoretically
consistent with the conceptualisation of enculturation awareness and will be addressed in the discussion of the results.

**Discussion**

The main objective of the first study was to construct an effective measure of enculturation awareness that captures the degree to which individuals have considered and come to understand cultural influences on the self. In order to achieve this objective, an initial EAS was constructed and subjected to structural and construct validity analyses by means of an Exploratory Factor Analysis and the examination of the relationships between the EAS and selected criterion measures.

**Structural and Construct Validity Assessments**

Results from the factor analyses support an internally consistent, bidimensional enculturation awareness measure that captures the extent to which people have consciously considered and come to understand how culture has shaped the development of their personal self-concepts. Although no hypotheses were made about the factor structure of the initial EAS, the emergent two-factor solution is theoretically consistent with the conceptualisation of the EAS as a measure that encapsulates both *self-reflection* (enculturation consideration) and *self-knowledge* (enculturation comprehension).

The emergent results largely conformed to our predictions, with the EAS relating to almost all of the criterion measures as hypothesized (with the exception of the Exploration in Breadth and Exploration in Depth Subscales). Furthermore, all of the correlations between both factors and the criterion measures fell within the small to medium range (with the exception of Cultural Identity Exploration) satisfying our requirements for effect size. Moreover, by making a distinction between the two components of enculturation awareness, we are able to explain why the relationships between the EAS and specific criterion measures were often only significant for one of the two EAS subscales.
**Identity exploration.** At the broadest level, identity exploration encapsulates the tendency for individuals to question their current identifications and to explore the possibility of new identity options present in the socio-cultural environment (Umaña-Taylor, Gonzales-backen, et al., 2009). The conceptualisation of enculturation consideration is similar to that of identity exploration in that it encapsulates the propensity for individuals to question how the socio-cultural environment has influenced the formation of their current identifications. Both identity exploration and enculturation consideration can, thus, be seen as self-reflective processes, where individuals explore the dynamic between culture and the development of their self-concepts.

The present findings support the link between these concepts as results indicated that enculturation consideration was positively associated with identity exploration measures of cultural identity exploration (the active exploration of one’s cultural heritage during the development of one’s cultural identity; Umaña-Taylor et al., 2004), and exploration in breadth (the examination of possible identity options concerning one’s important life choices; Luyckx et al., 2008). Notably, this pattern of results shows that enculturation consideration is associated with both the exploration of one’s cultural-identity as well as one’s personal identity, suggesting that considering how culture has come to shape one’s identifications may be a broader process that can be approached from multiple avenues. The results, thus, provide empirical support for the conceptualisation of enculturation consideration as relating to identity exploration.

Recent developmental research indicates however, that identity exploration is a multidimensional construct, where different components of exploration are differentially related with subsequent identity outcomes. The difference lies in that more active approaches to identity exploration (cultural-identity exploration, exploration in depth and breadth) are often associated with clearer and firmer identity commitments, while more cyclical, passive
approaches to identity exploration (ruminative exploration) have been found to relate to identity confusion and the postponement of identity commitment (Luyckx et al., 2008). In light of these findings, the two approaches are often categorised as ‘adaptive’ and ‘maladaptive’ identity exploration processes.

The positive relationship between enculturation consideration and adaptive identity exploration measures (cultural-identity exploration and exploration in breadth) add support to our conceptualisation of the EAS as relating to a non-judgemental form of self-reflection, which enables individuals to develop a clearer understanding of how culture has come to shape their current identifications. This interpretation is further supported by the non-signification relationship between enculturation consideration and the more maladaptive approach to identity exploration (ruminative exploration), suggesting that individuals who engage in enculturation consideration are unlikely to experience identity confusion. The present results thus, add support to the conceptualisation of the EAS as a metacognitive form of self-awareness that is a predominately ‘objective’ examination of cultural influences on the self. Unlike more chronic forms of self-regulation (Silvia & Gendolla, 2001), individuals engaging in this form of self-reflection are thought to be ‘above’ the content of their identifications, enabling them to develop a greater sense of clarity over the various identity components.

The findings also show, however, that merely thinking about how culture has shaped ones identity does not in and of itself reflect a clear understanding of how these cultural influences manifest in one’s self-concept (which is arguably captured by the separate EAS factor of enculturation comprehension). The distinction between ‘consideration’ and ‘comprehension’ is further supported by the finding that the Enculturation Consideration subscale was not significantly correlated with identity clarity and identity commitment measures. Such findings, alongside the emergence of the two-factor EAS structure, suggest
that enculturation consideration and enculturation comprehension are distinct (but interrelated) components of one’s overall enculturation awareness.

Identity clarity and commitment. The differentiation between ‘consideration’ and ‘comprehension’ converges with the larger literature concerning identity exploration and identity commitment, which has shown that the ‘exploration’ of one’s identity options is a separate process to the confirmation of identity commitments (Crocetti, Rubini, Luyckx, & Meeus, 2007). The research from the current study parallels this pattern in that the selected identity commitment measures were positively related to the Enculturation Comprehension subscale while being unrelated to the Enculturation Consideration subscale, showing a distinction between these constructs. Furthermore, the present results provide support for our conceptualisation of enculturation comprehension as the understanding concerning cultural influences on the self, by showing that greater levels of enculturation comprehension were positively associated with firmer identity commitments and likewise, a clearer sense of their personal self-concepts.

It is again worthy of note that enculturation comprehension was associated to a clear understanding of both one’s cultural and personal identity, adding support to our speculation that enculturation awareness may be developed by multiple avenues and may play an integral part throughout the construction of one’s self-concept more broadly (Yoder, 2000). Lastly, the negative relationship between the Enculturation Comprehension and the Ruminative Exploration subscales further bolsters the proposition that enculturation awareness relates to more adaptive identity exploration approaches, as the findings suggest that individuals with higher levels of enculturation comprehension are less likely to have engaged in ruminative exploration.
In general, the differential relationships between the criterion measures and the two EAS subscales provide support for the structural and construct validity of the EAS as a construct that captures self-reflection and knowledge of the self.

**Contradictory Findings**

Although on the whole, the results from the current study have largely supported our conceptualisation of the EAS (and the emergent subscales), there were, nevertheless, some notable findings that warrant further discussion.

**Exploration in depth.** Firstly, contrary to our predictions, the results show that the Enculturation Consideration subscale was not significantly correlated with the Exploration in Depth subscale, which captures the tendency for individuals to evaluate how well identity options reflect their self-concepts (Luyckx, et al., 2007). Although this may appear to contradict the proposed positive association between the EAS and identity exploration, a closer examination reveals that this result may be more due to the conceptual complexity of the Exploration in Depth subscale. While initial research with the Exploration in Depth subscale found it to be positively associated with adaptive psychological outcomes, more recent studies have suggested that exploration in depth might be a combination of both adaptive and maladaptive identity exploration processes (Crocetti et al., 2008).

Indeed, the present study presents support for this interpretation as the results showed that, while the Exploration in Depth subscale was positively associated with Exploration in Breadth (adaptive identity exploration), it was also positively associated with the Ruminative Exploration subscale (maladaptive exploration) andnegatively related with enculturation comprehension, cultural-identity clarity, identity coherence and identity commitment (see appendix C). Such findings, therefore, suggest that the more one engages in exploration in depth, the less likely he or she is to hold a clear and coherent identity. Thus, the finding that exploration in depth was not significantly related to enculturation consideration and was
negatively associated with enculturation comprehension, is perhaps due to the multifaceted nature of the exploration in depth construct, as it appears to be associated with both adaptive and maladaptive forms of identity exploration.

**Cultural-identity exploration.** Another notable finding was the significant positive association between the Cultural-Identity Exploration subscale and both the Enculturation Consideration and Enculturation Comprehension subscales. A possible explanation for such a result is that the Cultural-Identity Exploration subscale may actually be capturing an advanced level of identity exploration where the individual is no longer merely questioning his or her cultural identity, but has already begun to seek more information from the cultural community with the intent of making firmer cultural identity commitments. Indeed, cultural-identity exploration is operationalized as the ‘active’ participation in one’s cultural community for the purpose of gaining more clarity concerning one’s cultural identifications (Umaña-Taylor et al., 2004). Thus, cultural-identity exploration may be situated at a ‘later stage’ of exploration and would, therefore, be associated with a ‘middle-score’ of enculturation awareness, where the individual has attained some level of clarification concerning cultural influences on the self but is, nevertheless, still undergoing a process of exploration.

**Summary**

The emergent results from study one have provided important empirical evidence for establishing the construct and structural validity of the EAS. The findings converge in support of a two-factor model of the EAS, where the Enculturation Consideration and Enculturation Comprehension subscales relate to the selected criterion measures in a way that is theoretically and statistically consistent. In order to better situate the EAS in a wider psychological literature however, additional examination is needed of the theoretical
framework of enculturation awareness and its connection to a broader range of psychological concepts.

**Study II: Further Validation of the EAS**

The main purpose of the second study was to advance our theorising of the enculturation awareness concept as well as to further investigate the construct and structural validity of the EAS. In order to satisfy these goals, the study sought out to replicate the emergent two-factor structure of the EAS as well as examine its relationship with a constellation of theoretically related constructs. The satisfaction of these objectives would not only bolster our confidence in the reliability and validity of the EAS as a measure but would also further establish the nomological network of enculturation awareness as a psychological construct.

**Confirming the Factor Structure**

To further establish the structural validity of the EAS, the first aim of the present study was to confirm the two-factor model of the EAS found in study one, using a combined sample of New Zealand, Australian and US participants. The sample was extended to these three nations as they all share a common (English) language as well as a diverse ethnic and cultural populace, therefore, reflecting similar characteristics to previous sample.

**Interpreting the Factor Structure**

As well as statistically confirming the factor structure, it was important to further examine the presented interpretation of the two-factor model of the EAS, by assessing the construct validity of the Enculturation Consideration and Enculturation Comprehension subscales.

To review, the results from study one indicated that enculturation consideration was related to a type of objective self-reflection, whereby individuals ‘consider’ how culture has influenced the formation of their personal self-concepts. Enculturation comprehension, on
the other hand, captures how well individuals understand such cultural influences and thus was more related to the expression of ‘self-knowledge’ or ‘insight.’ In order to further scrutinize the validity this interpretation, the relationship between the EAS and the Self-Reflection and Insight Scale (Grant et al., 2006) was examined. Although it was predicted that, overall, the EAS would be positively associated with the Self-reflection and Insight Scale, it was anticipated that this relationship would vary across the two subscales – namely, that the Enculturation Consideration subscale would be more strongly related to the Self-Reflection subscale, and the Enculturation Comprehension subscale would be more strongly related to the Insight subscale. The confirmation of these predictions would add to the validity of our conceptualisation of the EAS subscales.

To sum, the structural validity and reliability of the EAS will be supported by:

1) Replication and confirmation of the two-factor structure of the EAS (i.e., the Enculturation Consideration and Enculturation Comprehension subscales).

2) A significant positive correlation between the EAS and the Self-Reflection and Insight Scale, with the Enculturation Consideration subscale being more strongly related to the Self-Reflection subscale and the Enculturation Comprehension subscale being more strongly related to the Insight subscale.

**Further Validation: Extending the Nomological Network of Enculturation Awareness**

The second main objective of the present study was to further assess the construct validity of the EAS and extend the nomological network of theoretically related constructs. Enculturation awareness being a novel concept, however, meant that the theoretical framework was mainly devised by drawing from the previously conducted enculturation awareness qualitative research (Balanovic & Ward, 2013), with the support of relevant psychological literature. Using this theoretical framework allowed us to predict the following relationships between the EAS and selected measures.
**Perceived Agency.** One of the most frequently occurring, and perhaps most prominent findings that emerged from the qualitative data was the apparent relationship between enculturation awareness and perceived agency. More specifically, the results indicated that those participants who exhibited higher levels of enculturation awareness (as demonstrated by higher level of *understanding* concerning cultural influences on the self) also tended to report feeling more in control of the identity construction process. As one interviewee reported:

“I know what’s wrong, what’s right. I know what I really want and what I really don’t want. Like I choose to wear the scarf over my head but I never choose to talk to male friends back there [Saudi Arabia]. So I know now that when I am talking to my male friends, I’m okay with it. I’m happy with it. And this is my choice. But back there it wasn’t my choice it was just because everyone there had never done it so I will not do it.” – Female, Age -22, Saudi Arabian.

In support of this proposed relationship, many theorists have argued that ‘self-reflection’ and ‘self-awareness’ are at the foundation of a healthy and stable sense of personal agency (Bandura, 1989, 2006; Frie, 2008). Further complementing the findings of the qualitative research, many such researchers agree that agency is not limited to the enacting of intentional behaviours, but rather that it extends to the purposeful shaping of one’s very self-perceptions – as psychologist Albert Bandura succinctly states “…people live in a psychic environment largely of their own making (Bandura, 2006, p. 165).” Such propositions have received empirical support from clinical studies, which have shown that patients with impaired self-reflective capabilities (characteristic of disorders such as schizophrenia and alexithymia) often experience a ‘loss’ of perceived agency concerning their internal functioning (G. Dimaggio et al., 2009; Lysaker et al., 2011).
In light of this body of research, the present study will examine the relationship between the EAS and measures of perceived agency to ascertain whether higher levels of enculturation awareness are associated with higher levels of perceived agency. As a high level of enculturation awareness is captured by the ‘comprehension’ of cultural influences on the self, it was predicted that perceived agency (assessed by the Perceived Control of Internal States Scale and the Value Autonomy subscale; Anderson, Worthington, Anderson, & Jennings, 1994; Pallant, 2000) would be significantly, positively associated with the Enculturation Comprehension subscale while having a non-significant relationship with the Enculturation Consideration subscale.

**Empathy.** Another important result that emerged from the qualitative data was the finding that those individuals who expressed higher levels of enculturation awareness were more likely to have considered the perspectives of others and relatedly, were more likely to feel empathic and understanding towards these individuals. The following statement illustrates this relationship:

“From that perception, we will be like, more understanding to people. So like, um, when we understand people that behave like that – so we don’t easily judge them, without taking consideration about their perception.” Female, Age- 24, Malay.

Such a proposition is consistent with research that has shown that adaptive self-reflection and accurate self-knowledge enhance an individual’s ability to perceive the thoughts and emotions of others (G. Dimaggio et al., 2008). This apparent connection between ‘knowing thyself’ and ‘knowing the other’ is often explained by the comparative nature of self-reflection, whereby people learn more about their own perceptions by comparing them to the perceptions of others. From this view, perspective taking can be seen as a tool by which individuals use to self-reflect and acquire self-knowledge (G. Dimaggio et al., 2008).
Furthermore, the research goes on to suggest that by continuously placing the self in the minds of others, perspective taking not only enhances one’s self-knowledge, but often heightens one’s sensitivity towards other people’s feelings and emotions (Joireman, Iii, & Hammersla, 2002). Such a pattern only emerges, however, for ‘objective’ self-reflection (as is the conceptualisation of the EAS) as research has found that more evaluative forms of self-attention (such as rumination or self-consciousness) often show the opposite trend, where the consideration of other peoples thoughts and feelings is experienced as threatening to one’s own self-image (Joireman et al., 2002).

Based on these findings, it was predicted that both the EAS subscales would be positively related with the consideration of alternative perspectives (the Perspective Taking subscale; Davis, 1983) and to feelings of warmth and empathy towards others (the Empathetic Concern subscale; Davis, 1983). As the theory postulates that perspective taking is a mechanism by which individual’s self-reflect and gain self-knowledge, and that empathetic concern is a by-product of this process, it is predicted that both the EAS subscales will be significantly and positively correlated with these two constructs.

Positive Psychological Outcomes. The third notable finding that surfaced from the qualitative data was the apparent inverse relationship between enculturation awareness and identity conflict. To elaborate, individuals who exhibited higher levels of enculturation awareness also appeared less likely to experience conflict between their multiple cultural or ethnic identities. Likewise, those individuals with lower enculturation awareness appeared to be more prone towards experiencing a dissonance between their multiple cultural identifications. Such a relationship has already received initial support from the findings in study one, which showed a positive association between the Enculturation Comprehension subscale and measures of personal identity clarity and cohesion.
Thus, in order to expand on these results, this study will directly examine the relationship between the enculturation awareness and ethno-cultural identity conflict (the perception that one’s cultural or ethnic identifications are incompatible and conflicting; Ward et al., 2011). It was hypothesised that the Ethno-Cultural Identity Conflict Scale would be negatively associated with the Enculturation Comprehension subscale (an expression of a high level of enculturation awareness) while having a non-significant relationship with the Enculturation Consideration subscale. The confirmation of this prediction would further support the proposition that, as people gain higher levels of enculturation awareness, they are also in a better position to identify and resolve any possible conflicts concerning their cultural identifications.

Relatedly, many of the reports in the qualitative data suggested that becoming increasingly aware of cultural influences on the self was a positive experience that often led to an increase in psychological well-being. Numerous participants expressed this by suggesting that the clarity they gained from their heightened awareness allowed them to establish a firmer sense of self (identity commitment), and that such confirmation was often associated with a greater sense of self-confidence (self-esteem) and satisfaction with one’s life circumstances (Balanovic & Ward, 2013). This is reflected in the developmental literature where a multitude of research has shown that identity commitment and self-concept clarity are strongly associated with measures of well-being (Campbell et al., 1996; Crocetti et al., 2008). Based on these findings, it is predicted that the satisfaction with one’s life circumstances (the Satisfaction with Life Scale; Diener, Emmons, Larsen, & Griffin, 1985) as well as the overall positive evaluation of one’s personal life (the Flourishing Scale; Diener et al., 2009) would be positively associated with greater levels of enculturation awareness (as captured by the Enculturation Comprehension subscale), while being unrelated to lower levels of enculturation awareness (as captured by the Enculturation Consideration subscale).
In sum, the extension of the nomological network and further validation of the EAS construct will be demonstrated by the following:

1) Significant small to medium positive correlations between both the EAS subscales and the Perspective Taking and Empathetic Concern subscales.

2) Significant small to medium positive correlations between the Enculturation Comprehension subscale and both measures of perceived agency (the Perceived Control of Internal States Scale and the Value Autonomy subscale) as well as psychological well-being measures (the Satisfaction with Life Scale and the Flourishing Scale).

1) A significant small to medium negative correlation between the Enculturation Comprehension subscale and the Ethno-Cultural Identity Conflict Scale.

**Methods**

**Procedure**

The same process of survey distribution and participant recruitment that was used in study one (see page 31) was also used for this study with the exception that the invitation for participation was extended to individuals living in the US and Australia as well as New Zealand.

**Participants**

Of the 569 participants who met the inclusion criteria, a sample of 317 participants (New Zealand = 176, Australia = 63, USA = 23) was retained for subsequent factor analyses, removing all those participants who had not completed approximately 90% of the EAS. The sample was further reduced for nomological network assessments, removing those participants who had not completed approximately 80% of the full survey, leaving a total of 301 participants (female = 178, male = 121) with an age range of 17-77 (\( M = 40.20 \) SD,
Seventy-six point seven percent of the participants were native born (in NZ, Australia or the US respectively) with the remaining 23.3% originating from countries predominately in Europe, Asia and the Americas. Although the ethnic descriptions varied across the country samples, the ‘Caucasian’ ethnic group was the largest in each case (NZ European, n = 118; US White, n = 54; Australian European, n = 33). The remainder of sample was, once again, made up of smaller ethnic groups that fell into larger geographic categories such as European (n = 43, e.g., French, German, English, Polish, Serbian, Dutch), NZ Maori/Tangata Whenua (n = 15), Asian (n = 14, e.g., Chinese, Indian, Japanese) and Latin American (n = 21. e.g., Argentinean, Hispanic, Latin American) and Pasifika (n = 3, e.g., Fijian, Niuean).²

Materials

The second survey included the refined 13-item EAS as well as empathy measures (Empathetic Concern, Perspective Taking), agency measures (Perceived Control of Internal States, Value Autonomy), a self-reflection measure (Self-Reflection and Insight) and measures of positive psychological outcome (Flourishing, Satisfaction with Life, Ethno-Cultural Identity Conflict). Alongside these selected measures, demographic and background information was also collected which included: age, gender, country of origin, residential status, ethnicity and English Language Proficiency. Each of the selected measures are described as follows:

The Empathetic Concern [EC] and Perspective Taking [PT] subscales: Taken from a global measure of Empathy (the Interpersonal Reactivity Index; Davis, 1983) – Empathetic Concern (EC) and Perspective Taking (PT) are two 7-item subscales that assess key elements of empathy. The EC subscale captures the extent to which respondents

² All participants indicated, once again, reported at least a ‘good’ level of global English language proficiency and thus lending confidence that the subsequent results were not significantly influenced by language barriers.
experience other-orientated feelings of empathy and concern, whereas the PT subscale captures the “tendency to spontaneously adopt the psychological point of view of the other (Davis, 1983, pp. 113–114).” Participants respond to items such as “I often have tender, concerned feelings for people less fortunate than me (EC),” and – “I believe that there are two sides to every question (PT)” using a 5-point Likert scale ranging from (1) does not describe me well to (5) describes me very well. Both the EC and PT subscales have demonstrated satisfactory internal consistency (α = .71, .77) and test-retest reliability (r = .62 - .71) – which confirms their usage as an independent measures as well as components of Interpersonal Reactivity Index (Davis, 1983). Higher scores on both the EC and PT subscales indicate greater concern for others and perspective taking respectively.

The Self-Reflection and Insight Scale (SRINS): The SRINS is a 20-item metacognitive construct that captures both a) Self–Reflection (12 items) - the inspection and evaluation of one’s thoughts, feelings and behaviours and b) Insight (8 items) – the clarity of understanding of one’s thoughts, feelings and behaviours (Grant et al., 2006). Participants respond to items such as “I don't really think about why I behave the way that I do” (Self-Reflection, reverse scored) and “I usually have a very clear idea about why I have behaved in a certain way” (Insight) – using a 5-point Likert scale which ranges from (1) strongly disagree to (5) strongly agree. Both scales have been found to be highly reliable with Cronbach alpha’s of α = .91 and .87. Individual scores are calculated using each subscale score – with greater scores indicating higher levels of Self-Reflection and Insight respectively.

The Perceived Control of Internal States Scale (PCOIS): The PCOIS is an 18-item construct that assesses the degree to which people perceive themselves as having control over their internal states (emotions, thoughts and physical reactions to internal experiences; Pallant, 2000). In the context of this research, control is defined as “the belief that one can
determine one’s own internal states and behaviour, influence one’s environment and/or bring about desired outcomes (Pallant, 2000, p. 309).” Participants respond to items such as “If my stress levels get too high I know there are things I can do to help myself,” using a 5-point Likert scale that ranges from (1) strongly disagree to (5) strongly agree, with higher scores indicating greater perceived control over one’s internal states. The PCOIS has been demonstrated satisfactory internal consistency with an alpha of .92.

**The Value Autonomy subscale:** The Value Autonomy subscale is a 10-item measure taken from a larger 40-item Autonomy Scale (Anderson et al., 1994) which captures an individual’s ability to make decisions concerning his or her vocation, morals and beliefs. Participants respond to items such as “I allow others to influence my ideas about what is right or wrong,” (reverse scored) and “I feel uncomfortable exploring attitudes that are new to me,” (reverse scored) – using a 4-point Likert scale that ranges from (1) strongly disagree to (4) strongly agree, with higher scores indicating greater value autonomy. The subscale has demonstrated adequate internal consistency ($\alpha = .75$), supporting its usage as both a subscale as well as a component of the larger Autonomy Scale (Anderson et al., 1994).

**The Ethno-Cultural Identity Conflict Scale (EIC):** The EIC is a 20-item measure that applies to those with more than one cultural or ethnic identity and assesses the extent to which they experience conflict between these identities. Identity conflict is captured by the perception that different identity components, such as values, behaviours and commitments, are incompatible with one another (Ward et al., 2011). The EICS is composed of both culture specific items such as “I find it impossible to be part of both my cultural group and the wider society,” as well as identity general items “I sometimes do not know where I belong,” to which participants respond to using a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Higher scores on the EIC indicate greater ethno-cultural identity conflict. To ensure that participants were responding in reflection of their ethno-cultural
identities, a prompt is included at the beginning of the measure that instructed the participants to respond to each item in the context of their cultural or ethnic background. The EIC has demonstrated satisfactory internal consistency with a Cronbach alpha of .90. As the EIC examines conflict between two or more ethno-cultural identities, only those participants who self-identified as ethnic-minority group members were given the opportunity to complete the ethno-cultural identity measure by answering the preceding yes or no question: “Do you consider yourself to be an ethnic minority?”

The Flourishing Scale: The Flourishing Scale is an 8-item domain-general measure of ‘social-psychological prosperity’ – which was designed to complement existing measures of subjective well-being (Diener et al., 2009). Participants respond to items such as “I lead a purposeful and meaningful life” and “I actively contribute to the happiness and well-being of others” – using a 7-point Likert scale that ranges from (1) strongly disagree to (7) strongly agree, with higher scores indicating greater flourishing. The internal consistency of the flourishing scale was shown to be satisfactory with a Cronbach alpha of .87.

The Satisfaction with Life scale (SWL): The SWL scale is a 5-item construct that has been used prolifically in psychological research as a measure of subjective well-being (Diener et al., 1985). Participants respond to items such as “The conditions of my life are excellent” using a 7-point Likert scale which ranges from (1) strongly disagree to (7) strongly agree, with higher scores indicating higher satisfaction with life. The internal consistency of the SWL been demonstrated in a multitude of studies, with an average Cronbach alpha of 0.78 and an average test-retest reliability of .82 conducted over a period of two months (Corrigan, Kolakowsky-Hayner, Wright, Bellon, & Carufel, 2013).

The English Language Proficiency Scale: The ELP is a conventionally 4-item measure that assesses people’s self-evaluations of their English language abilities in areas of reading, writing, speaking and comprehension (Zheng & Berry, 1991). Participants respond
to the prompt “Please rate your level of English language proficiency in the following areas” using a 5-point Likert scale ranging from (1) poor to (5) excellent, with higher total scores indicating greater global English language proficiency. Note that this scale was preceded by a question that asked participants whether or not they English was their first language, to which they respond using a dichotomous ‘yes’ and ‘no’ response format. Only those participants who indicated ‘no’ where prompted to complete the English Language proficiency measure.

**Results**

**Analytic Procedure**

**Data-Imputation.** In preparation for the CFA, an expectation maximization analysis was conducted to examine whether the CFA sample ($N=317$) was suitable for an imputation of missing values. Results from this analysis revealed that data imputation would cause a significant change to the data (Little’s MCAR test: Chi-Square = 88.673, $df=58$; $p < .001$). A closer examination revealed that, out of the total 4121 data-points, there were only five missing values. Furthermore, face validity assessments indicated no notable difference between real and imputed mean scores. In light of these observations, we proceeded with a missing values imputation and used the imputed data-set for subsequent factor analyses.

**CFA.** To validate factor structure of the EAS, a Confirmatory Factor Analysis (CFA) was conducted with a maximum likelihood estimation that was performed using AMOS –20 (a structural equation modelling programme attached to IBM SPSS 20). By conducting a CFA, we were able to examine how the proposed factor structure of the EAS found in study one fit a distinct sample.

**Scale Refinement.** Once the CFA was performed, the factor loadings of all 13 items were examined. Table 7 demonstrates that the results generally conformed to the predicted two-factor structure of the EAS with high item loadings in both the Enculturation
Consideration and Enculturation Comprehension subscales. Furthermore, the model fit indices provided some support for the 13-item EAS model with both the CFI and NFI fit.
Table 7 - Fit indices for the thirteen-item, twelve-item and eleven-item two-factor model for the EAS.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CMIN</th>
<th>$p$</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>90% CI</th>
<th>$\Delta$CMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Factor model</td>
<td>263.57</td>
<td>64</td>
<td>4.118</td>
<td>&lt;.001</td>
<td>.920</td>
<td>.938</td>
<td>.099</td>
<td>.087, .112</td>
<td>-</td>
</tr>
<tr>
<td>Two-Factor Model with one-item covariance (Items 4, 6 and 10)</td>
<td>219.81</td>
<td>61</td>
<td>3.603</td>
<td>&lt;.001</td>
<td>.934</td>
<td>.951</td>
<td>.091</td>
<td>.078, .104</td>
<td>ns.</td>
</tr>
<tr>
<td>Two-Factor model with one-item removal (Item 4)</td>
<td>185.55</td>
<td>53</td>
<td>3.501</td>
<td>&lt;.001</td>
<td>.938</td>
<td>.955</td>
<td>.089</td>
<td>.075, .103</td>
<td>.000</td>
</tr>
<tr>
<td>Two-Factor model with one-item covariance (Item 6 and 8)</td>
<td>185.35</td>
<td>52</td>
<td>3.564</td>
<td>&lt;.001</td>
<td>.938</td>
<td>.955</td>
<td>.090</td>
<td>.076, .104</td>
<td>ns.</td>
</tr>
<tr>
<td>Two Factor Model with two-item covariance (Item 4 and Item 6)</td>
<td>107.93</td>
<td>43</td>
<td>2.510</td>
<td>&lt;.001</td>
<td>.959</td>
<td>.975</td>
<td>.069</td>
<td>.053, .086</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: $N = 317$ for all model analyses, $\chi^2 = \text{chi-square}; df = \text{degrees of freedom}; CMIN = \chi^2/df; NFI = \text{Normed Fit Index}; CFI = \text{Comparative Fit Index}; RMSEA = \text{Root Mean Square Error of Approximation}; 90\% CI = \text{confidence interval for RMSEA}; $\Delta$CMIN = \text{Significance of change in chi-square ratio}.
indices reaching values of above .90 ($\chi^2 (64) = 263.57, p < .001; \text{CFI} = .938; \text{NFI} = .920$) representing an adequate model fit. However, the CMIN and RMSEA fit indices were unacceptably high ($\chi^2/df = 4.118; \text{RMSEA}, 0.99$) which indicate a poor model fit (Hooper, Coughlan, & Mullen, 2008). Due to these inconsistent results, we referred to the modification indices to examine possible cross-loadings of items and/or correlated measurement errors.

Modification indices revealed a substantial error covariance between item 4, (“I am unsure how my culture has influenced the way I interact with others”) and items 6 and 10. Two alternative models were therefore tested to examine whether they would improve model fit. The first model introduced a covariance term between item 4 to items 6 and 10 which did not significantly improve the model fit ($\chi^2 (61) = 219.807; \Delta \chi^2/df = 3.603, p > 0.05$). A second alternative model was tested where item 4 was removed from the model altogether, resulting in a significant improvement in fit ($\chi^2 (53) = 185.55, \Delta \chi^2/df = 3.501, p < .001$) and, therefore, gave justification for the removal of the item from the measure.

Further endorsing the removal of this item is the theoretical consideration that this particular item was primarily focused on how culture shapes peoples ‘interactions,’ meaning that it was essentially tapping the degree to which people understood how culture has shaped not only their own behaviour but also the behaviour of others. As previously mentioned in study one (see page 29), being aware of how culture influences the behaviour of others can be seen as a means of developing enculturation awareness, but is not representative of enculturation awareness in of itself. In light of these statistical and theoretical considerations, item 4 was discarded from the EAS.

Despite these improvements, the CMIN value was still above the recommended cut-off of 2.50 and the RMSEA was above the acceptable range of .01 - .08 (Hooper et al., 2008). The modification indices suggested that the potential cause of this misfit was due to an error
covariance between item 6 (“I am unsure in what way my values have been influenced by my culture”) and item 8 (“It’s hard for me to say how my values have been influenced by my culture”). As can be noted, these items share a considerable amount of content overlap, possibly reducing the parsimony of the model. To improve model fit, two alternative models were once again tested to assess which changes would result in the lowest level of misfit. The first model included a covariance term between item 6 and item 8 which did not significantly improve model fit ($\chi^2 (53) = 185.345, ns; \Delta \chi^2/df = ns$).

### Table 8 - Descriptive statistics of the 11-item version of the EAS.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>$M$</th>
<th>$SD$</th>
<th>Item-Total Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have thought about how my values have been shaped by my culture</td>
<td>5.80</td>
<td>1.351</td>
<td>.41</td>
</tr>
<tr>
<td>2</td>
<td>I am unsure in what ways my culture has influenced my perspective of the world</td>
<td>4.88</td>
<td>1.562</td>
<td>.43</td>
</tr>
<tr>
<td>3</td>
<td>I have thought about how my culture has shaped the way I behave</td>
<td>5.95</td>
<td>1.163</td>
<td>.41</td>
</tr>
<tr>
<td>4</td>
<td>I have thought about how my perspective of the world has been shaped by my culture</td>
<td>5.75</td>
<td>1.300</td>
<td>.43</td>
</tr>
<tr>
<td>5</td>
<td>I am unsure in what ways my culture has influenced the way I think</td>
<td>4.95</td>
<td>1.539</td>
<td>.44</td>
</tr>
<tr>
<td>6</td>
<td>I have considered how my culture has shaped the way I think</td>
<td>5.87</td>
<td>1.181</td>
<td>.43</td>
</tr>
<tr>
<td>7</td>
<td>It’s hard for me to say how my values have been influenced by my culture</td>
<td>4.89</td>
<td>1.564</td>
<td>.44</td>
</tr>
<tr>
<td>8</td>
<td>I have thought about how my identity has been shaped by my culture</td>
<td>5.76</td>
<td>1.244</td>
<td>.44</td>
</tr>
<tr>
<td>9</td>
<td>It’s hard for me to say how my culture has shaped the way I think.</td>
<td>4.89</td>
<td>1.603</td>
<td>.46</td>
</tr>
<tr>
<td>10</td>
<td>It’s difficult for me to say how my identity has been shaped by my culture</td>
<td>4.98</td>
<td>1.533</td>
<td>.47</td>
</tr>
<tr>
<td>11</td>
<td>I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture.</td>
<td>5.16</td>
<td>1.518</td>
<td>.40</td>
</tr>
</tbody>
</table>

Conversely, the removal of item 6 significantly improved model fit ($\chi^2 (43) = 107.93, p < .001; \Delta \chi^2/df, p < .001$) with all of the fit indices falling within an adequate to good range of model fit (CFI = .975; NFI = .959; RMSEA = 0.69, see table 7 for full details), justifying
the removal of item 6 from the measure. The item-total correlations of the retained 11 items are presented in Table 8 alongside relevant descriptive statistics. Furthermore, the internal consistency of this 11-item version of the EAS was found to be highly reliable with a Cronbach alpha of .91 (comparable with study one’s Cronbach alpha of .93), as well as the Enculturation Consideration and Enculturation Comprehension subscales (.92, .92 respectively, refer to Table 9). Based on these findings, the 11-item two-factor model of the EAS was adopted and used for all subsequent analyses (see Table 9 for CFA factor loadings).

**Table 9 - Factor Loadings of the 11-item version of the EAS.**

<table>
<thead>
<tr>
<th>CFA – Refined Model</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Items</strong></td>
<td>α = .92</td>
</tr>
<tr>
<td><strong>Enculturation Consideration</strong></td>
<td></td>
</tr>
<tr>
<td>I have thought about how my values have been shaped by my culture</td>
<td>.87</td>
</tr>
<tr>
<td>I have thought about how my culture has shaped the way I behave</td>
<td>.87</td>
</tr>
<tr>
<td>I have thought about how my perspective of the world has been shaped by my culture</td>
<td>.85</td>
</tr>
<tr>
<td>I have considered how my culture has shaped the way I think</td>
<td>.84</td>
</tr>
<tr>
<td>I have thought about how my identity has been shaped by my culture</td>
<td>.79</td>
</tr>
<tr>
<td><strong>Enculturation Comprehension</strong></td>
<td></td>
</tr>
<tr>
<td>I am unsure in what ways my culture has influenced my perspective of the world. (R)</td>
<td>-</td>
</tr>
<tr>
<td>I am unsure in what ways my culture has influenced the way I think (R)</td>
<td>-</td>
</tr>
<tr>
<td>It’s hard for me to say how my values have been influenced by my culture (R)</td>
<td>-</td>
</tr>
<tr>
<td>It’s hard for me to say how my culture has shaped the way I think (R)</td>
<td>-</td>
</tr>
<tr>
<td>It’s difficult for me to say how my identity has been shaped by my culture (R)</td>
<td>-</td>
</tr>
<tr>
<td>I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture (R)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Factor 1 Intercorrelation</strong></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>.41**</td>
</tr>
</tbody>
</table>
Extension of Nomological Network

Once the factor structure of the EAS was confirmed, we were able to proceed with the extension of the nomological network by examining how the EAS related to measures of empathy, agency, self-reflection and positive psychological outcomes.

Data-imputation. To begin this process, we once again assessed the suitability of the 307 responses (from the nomological network data-set) for an imputation by conducting an expectation maximization analysis. Results revealed that an imputation of the 61 missing data points would not significantly impact the scale means or standard deviations (Little’s MCAR test: chi-square = 1652.267, df = 1601; ns). We therefore proceeded with a missing values imputation and used this complete data-set for all subsequent analyses.

Scale quality checks. The psychometric properties of the EAS alongside all of the related measures are presented in Table 10. Overall, the included measures demonstrated sound internal consistency with 12 out of 14 of the constructs reaching alpha’s of above .70.

Table 10 - Psychometric properties of the EAS alongside selected measures.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enculturation Awareness</td>
<td>11</td>
<td>1.9 - 7.0</td>
<td>5.38</td>
<td>1.00</td>
<td>.90</td>
</tr>
<tr>
<td>- Enculturation Consideration</td>
<td>5</td>
<td>1.0 - 7.0</td>
<td>5.86</td>
<td>1.061</td>
<td>.92</td>
</tr>
<tr>
<td>- Enculturation Comprehension</td>
<td>6</td>
<td>1.0 - 7.0</td>
<td>4.98</td>
<td>1.313</td>
<td>.92</td>
</tr>
<tr>
<td>Ethno-Cultural Identity Conflict</td>
<td>20</td>
<td>1.2 - 3.9</td>
<td>2.44</td>
<td>.705</td>
<td>.91</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>6</td>
<td>1.5 - 5.0</td>
<td>3.81</td>
<td>.658</td>
<td>.76</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>7</td>
<td>1.9 - 5.0</td>
<td>3.73</td>
<td>.596</td>
<td>.75</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>5</td>
<td>1.0 - 7.0</td>
<td>4.51</td>
<td>1.572</td>
<td>.92</td>
</tr>
<tr>
<td>Flourishing</td>
<td>8</td>
<td>1.0 - 7.0</td>
<td>3.85</td>
<td>.500</td>
<td>.91</td>
</tr>
<tr>
<td>Self-Reflection and Insight</td>
<td>20</td>
<td>2.3 - 4.9</td>
<td>3.39</td>
<td>.675</td>
<td>.86</td>
</tr>
<tr>
<td>- Self-Reflection</td>
<td>12</td>
<td>1.3 - 5.0</td>
<td>6.0</td>
<td>.549</td>
<td>.92</td>
</tr>
<tr>
<td>- Insight</td>
<td>8</td>
<td>1.9 - 4.7</td>
<td>3.54</td>
<td>1.071</td>
<td>.61</td>
</tr>
<tr>
<td>Perceived Control of Internal States</td>
<td>18</td>
<td>1.2 - 5.0</td>
<td>5.41</td>
<td>1.140</td>
<td>.92</td>
</tr>
<tr>
<td>Value Autonomy</td>
<td>8</td>
<td>2.0 - 4.0</td>
<td>3.15</td>
<td>.364</td>
<td>.60</td>
</tr>
</tbody>
</table>

3 Only those participants who self-identified as ethnic-minority group members were given the opportunity to complete the Ethno-Cultural Identity measure. As such, the EIC was excluded from missing value imputation as doing so would have made the data misrepresented for the ethnic majority group members who were not given the opportunity to complete this measure.
There were only two potentially problematic measures - Value Autonomy ($\alpha = .60$) and the Insight subscale ($\alpha = .61$) - both of which showed relatively low alphas. Further examination revealed that, although the average inter-item correlation of the Insight scale did fall within the acceptable range of .2 and .4 (.38), the value autonomy scale did not ($r = .18$; Briggs & Cheek, 1986). As such, subsequent results using the Value Autonomy measure should be interpreted with caution.

Tables 12, 13 and 14 display correlation matrices of the relationships between the EAS and the selected variables (see appendix D for full correlation matrix between all variables). The findings reveal that almost all of the hypothesized relationships were confirmed by the present data, extending the nomological network of the enculturation awareness concept while adding to the construct validity of the EAS measure.

Table 11 - Correlation matrix between the EAS and the self-reflection and insight scale.

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 EAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 E-Con</td>
<td>.75**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 E-Com</td>
<td>.90**</td>
<td>.38**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 SRINS</td>
<td>.36**</td>
<td>.39**</td>
<td>.24**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 INS</td>
<td>.28**</td>
<td>.14*</td>
<td>.30**</td>
<td>.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 SR</td>
<td>.29**</td>
<td>.39**</td>
<td>.14*</td>
<td>.91**</td>
<td>.18**</td>
<td></td>
</tr>
</tbody>
</table>

Note $N = 307$, EAS = Enculturation Awareness Scale, E-Con = Enculturation Consideration subscale, E-Com = Enculturation Comprehension subscale, SRINS = Self-Reflection and Insight Scale, SR= Self-Reflection subscale, INS = Insight subscale. All figures represent a Pearson’s $r$ correlation. * $p < .05$. ** $p < .01$.

Self-reflection and insight. The hypothesis that the EAS would be positively related to self-observation and self-knowledge was supported (Table 11), as the results demonstrate that both the EAS subscales were significantly positively correlated to the combined Self-Reflection and Insight Scale (SRIS) (enculturation consideration, $r = .39$, $p < .01$; enculturation comprehension, $r = .24$, $p < .01$). Furthermore, results show that the Enculturation Consideration subscale was more strongly correlated with the Self-reflection subscale ($r = .39$, $p < .01$) than the Insight Subscale ($r = .14$, $p < .05$) and that the Enculturation Comprehension subscale was more strongly correlated with the Insight subscale ($r = .30$, $p < .01$) than the Self-
Reflection subscale \( (r = .14, p < .05) \). A subsequent Steiner Z analysis indicated that this was a significant difference in strength (Self-Reflection, \( Z = .208, p < .05 \), 2-tailed; Insight, \( Z = 3.34, p < .001 \), 2-tailed). The findings thus indicate that the consideration of cultural influences on the self is more strongly associated with self-observation whereas the comprehension of how culture influences the self is more strongly associated with insight.

**Table 12 - Correlations between the EAS and agency measures.**

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EAS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. E-Con</td>
<td>.75**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. E-Com</td>
<td>.90**</td>
<td>.38**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PCISS</td>
<td>.19**</td>
<td>.07</td>
<td>.21**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. VA</td>
<td>.27**</td>
<td>.21**</td>
<td>.24**</td>
<td>.38**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note N = 307, EAS = Enculturation Awareness Scale, E-Con = Enculturation Consideration subscale, E-Com = Enculturation Comprehension subscale, PCISS = Perceived Control of Internal States Scale, VA = Value Autonomy subscale. All figures represent a Pearson’s r correlation. *p < .05. **p < .01.*

**Perceived agency.** The prediction that higher levels of enculturation awareness (as captured by enculturation comprehension) would be positively associated with measures of perceived agency was supported (Table 12), as the results show that the Enculturation Comprehension subscale was significantly positively correlated with the Perceived Control of Internal States Scale \( (r = .21, p < .01) \) and the Value Autonomy Subscale \( (r = .24, p < .01) \). The findings thus indicate that understanding how culture has influenced one’s identity is associated with a higher sense of perceived control over one’s thoughts, feelings and values.

**Empathy.** The prediction that both of the EAS subscales would be positively associated with measures of empathy was confirmed (Table 13) as the results show that both
the Enculturation Consideration and Enculturation Comprehension subscales were significantly positively correlated with the Empathetic Concern subscale (Enculturation consideration, $r = .30, p < .01$; Enculturation Comprehension, $r = .12, p < .05$) as well as the Perspective Taking subscale (Enculturation Consideration, $r = .30, p < .01$; Enculturation Comprehension, $r = .25, p < .01$). These findings indicate that enculturation awareness is related to the consideration of alternative perspectives as well as other-focused feelings of empathy and concern.

**Table 13 - Correlations between the EA scale and Outcome Measures.**

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EAS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. E-Con</td>
<td>.75**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. E-Com</td>
<td>.90**</td>
<td>.38**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SWL</td>
<td>.01</td>
<td>-.01</td>
<td>.01</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. FLR</td>
<td>.20**</td>
<td>.20**</td>
<td>.15*</td>
<td>.62**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. EIC</td>
<td>-.43**</td>
<td>-.19</td>
<td>-.48**</td>
<td>-.37*</td>
<td>-.48**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note: N = 307 for all scales with the exception of EIC (N = 51), EAS = Enculturation Awareness Scale, E-Con = Enculturation Consideration subscale, E-Com = Enculturation Comprehension subscale; SWL = Subjective Well Being Scale, FLR = Flourishing Scale; EIC = Ethno-Cultural Identity Conflict Scale. All figures represent a Pearson’s r correlation. *p < .05. **p < .01.*

**Positive psychological outcomes.** The predictions made about how the EAS would relate to a selection of outcome measures were mostly supported by the data (Table 14).

Results showed that both the EAS subscales were significantly, positively correlated with the Flourishing scale (enculturation consideration $r = .20, p < .01$, enculturation comprehension, $r = .15, p < .05$). Furthermore, results indicated a significant negative relationship with the Ethno-Cultural Identity Conflict scale and the Enculturation Comprehension subscale ($r = -.48, p < .01$). Contradicting these findings however, there was no significant relationship found between the EAS and the Satisfaction with Life Scale ($r = .02, ns$). These findings suggest that enculturation comprehension is related to more social forms of subjective well-being but is not related to the satisfaction with one’s own life circumstances. The nature of these relationships will be addressed in further detail in the discussion of the results.

**Discussion**
The main purpose of the second study was to refine and expand our understanding of the EAS measure by subjecting it to further structural and construct validity assessments. To fulfil this objective, the study firstly sought to confirm the emergent two-factor EAS model found in study one, consisting of the Enculturation Consideration and Enculturation Comprehension subscales. Subsequently, the nomological network of the EAS construct was extended by assessing its relationship with a constellation of theoretically related constructs, allowing us to better situate enculturation awareness in a wider area of psychological research.

**Factor Structure of Enculturation Awareness**

**Confirmatory Factor Analysis.** Produced CFA results confirmed the factor structure of the EAS by replicating the two subscales of Enculturation Consideration (considering how culture has come to influence the self) and Enculturation Comprehension (understanding how culture has influenced the self). Furthermore, by referring to the modification indices, we were able to refine the EAS by removing problematic items that were reducing model fit. Once scale refinement was complete, all of the fit indices indicated a good model fit – leading us to accept the final 11-item EAS model. The present CFA findings, therefore, present additional statistical support for the structural validity of the EAS.

**Subscale interpretation.** Further supporting the interpretation of the two EAS factors was the emergent relationship between the two subscales and the Self-Reflection and Insight Scale. Specifically, the results indicated that, although the SRINS was positively associated to both EAS subscales, the Enculturation Consideration subscale was more strongly related to the Self-Reflection subscale, whereas the Enculturation Comprehension subscale was more strongly related to the Insight subscale.

This finding has two important implications for our understanding of the EAS as a construct. Firstly, the positive association between the SRINS and both the EAS subscales
indicates that engaging in self-reflection and acquiring accurate self-knowledge (insight) are processes that are related to both aspects of one’s enculturation awareness, from the initial questioning of cultural influences on the self (enculturation consideration), to the understanding of how such cultural influences manifest in one’s identifications (enculturation comprehension). Secondly, the differential strength of the associations across the subscales indicate that self-reflection is more pronounced during earlier stages of enculturation awareness (enculturation consideration), whereas insight is more evident when one has gained some clarity concerning his or her self-concept (enculturation comprehension). Thus, the current results provide added support for the conceptualisation of the EAS as capturing both self-observation and self-knowledge.

**Extending the Nomological Network**

In order to extend the nomological network of the enculturation awareness construct, the study examined the relationship between the EAS and measures of perceived agency, empathy and positive psychological outcomes.

**Perceived agency.** Psychological agency, put most simply, is the perception that one is capable of directing his or her internal functioning and external behaviours (Bandura, 1989, 2006). The perception of the self as an ‘agent’ is, therefore, founded on the ability to ‘self-reflect’ and recognise the self as being the author of one’s thoughts and identifications. Likewise, it is argued that adaptive self-reflection and the acquisition of accurate self-knowledge can greatly enhance one’s agentic potential – allowing individuals to discover new ways of seeing and being in the world (Frie, 2008).

The findings from the present study converge within this framework, with the results indicating that the more aware individuals were of how culture has come to shape their personal self-concepts (as indicated by higher enculturation comprehension scores), the more likely they were to perceive themselves as being in control of their internal functioning as
well as having firmer, more socially resistant value commitments. The present study, therefore, provides preliminary support for the proposed relationship between enculturation awareness and perceived agency, where understanding how culture has influenced one’s self-concept may empower that individual to perceive him or herself as being more in control over this influence.

**Empathy.** Research has shown that understanding one’s own thoughts and feelings (engaging in self-reflection and acquiring self-knowledge) enables people to better understand the thoughts and feelings of others (G. Dimaggio et al., 2008). The theory behind this relationship posits that people often become aware of their own mental states by considering the mental states others - clarifying their own perspectives as they consider alternative points of view. Furthermore, by continuously placing the self in the mind of the other, individuals often develop a greater sensitivity for how other people feel, and are therefore, more inclined to empathise with their experiences (G. Dimaggio et al., 2008).

Reflecting this research, the results from the present study show that the Enculturation Consideration (a process of self-reflection) and Enculturation Comprehension (an expression of self-knowledge) subscales were both positively associated with an increased consideration of the thoughts and feelings of others. Moreover, the fact that both of the EAS subscales were positively associated with the perspective taking subscale supports the hypothesis that considering alternative points of view is a ‘tool’ by which people use to develop enculturation awareness. Furthermore, the fact that empathetic concern was also positively associated with both EAS subscales, endorses the proposition that empathetic concern is a ‘by-product’ of perspective taking. Overall, the present findings support the qualitative data in showing a positive association between enculturation awareness and more nuanced understandings of the thoughts and feelings of others.
Positive psychological outcomes. Having a clear and coherent sense of one’s self-concept has repeatedly been found to predict positive psychological outcomes, such as high self-esteem, purpose in life and mental well-being (Campbell et al., 1996; Dhar, Sen, & Basu, 2010; Vignoles et al., 2006). Complementing such findings, studies have also shown that experiencing identity confusion and instability often relates to poor psychological adjustment such as depression, anxiety and neuroticism (Bigler et al., 2001; Campbell, 1990; Donahue et al., 1993; Schwartz, Klimstra, et al., 2011).

The findings from the present study complement this literature by showing that the more clearly individuals understood how culture has come to shape the self (higher levels of enculturation comprehension), the more likely they were to report higher levels of subjective well-being and likewise, the less likely they were to experience conflict between their multiple ethno-cultural identities. This is reflected by the finding that the Enculturation Comprehension subscale was positively associated with the Flourishing Scale and negatively associated with Ethno-Cultural Identity Conflict Scale.

Contrary to our predictions, however, the Flourishing Scale was positively related to the Enculturation Consideration subscale as well as Enculturation Comprehension, suggesting that considering how culture has influenced the self may have positive psychological effects above and beyond the clarity one gains from engaging in such a process. It could be the case that engaging in enculturation consideration may enable people to resolve any identity issues concerning the dynamic between their self-concepts and their cultural environments, which provides the individual with a sense of control over their identifications (even before they have reached a high level of identity clarity). In other words, increased levels of perceived agency may mediate the positive relationship between enculturation consideration and positive psychological outcomes.
Challenging the supposed relationship between the EAS and positive psychological outcomes, however, is the unexpected non-significant relationship between both the EAS subscales and the Satisfaction with Life Scale. A plausible explanation for this inconsistent finding is that enculturation awareness is likely to be more related to social aspects of subjective-well-being while being relatively unrelated to the objective evaluation of one’s life circumstances. In support of this argument, the results from the current study indicated that the Satisfaction with Life Scale was not significantly related to variables that tapped more social psychological phenomena, such as the empathic concern subscale and perspective taking subscale. The Flourishing Scale, on the other hand, was significantly positively related to all of these socially focused variables, supporting its ability to incorporate social aspects of subjective well-being (see appendix D). In light of this, enculturation awareness can be viewed as relating to more social aspects of subjective-well-being while remaining relatively unrelated to the positive evaluation of one’s life conditions. Such an interpretation converges with the conceptualisation of enculturation awareness as a construct that focuses on how one’s cultural (and therefore social) environment influences the self.

**Summary**

The findings from the current study have further endorsed the structural and construct validity of the EAS as capturing the exploration of cultural influences on the self (enculturation consideration) as well as the understating of how these influences manifest in one’s identifications (enculturation comprehension). Furthermore, the emergent findings have largely supported the predicted theoretical framework of enculturation awareness, with the results showing positive associations between the EAS and measures of perceived agency, empathy and positive psychological outcomes. What is more, the strength of all of the correlations were, once again, small to medium in effect size, providing additional confirmatory evidence for the convergent and discriminant validity of the EAS.
**General Discussion**

Much of the current research concerning the dynamic between culture and identity is premised on the assumption that enculturation (cultural acquisition during identity development) is largely an unconscious process of cultural internalization (Christopher & Bickhard, 2007; Kitayama, Duffy & Uchida, 2005; Nunes, 2003; Weinreich, 2009). Recent developments in the field of acculturation and developmental research, however, have shown that individuals are capable of actively engaging with their cultural environments for the purposes of exploring and clarifying their identifications. Although such findings imply a level of conscious awareness - to date – no research has explicitly examined the degree to which people are aware of cultural influences on the self and how varying levels of awareness may influence the development of the personal self-concept.

The present paper responded to this need by establishing an Enculturation Awareness Scale (EAS) – a new construct that empirically examines the degree to which individuals have consciously *considered* and come to *understand* how culture has come to shape their personal self-concepts. This objective was achieved by means of initial scale development followed by structural and construct validity assessments.

Drawing from the extant qualitative data on enculturation awareness (Balanovic & Ward, 2013), and other relevant research, the first study produced the initial EAS – with subsequent factor analyses showing an emergent two-factor structure consisting of enculturation consideration (the degree to which an individual has *considered* how culture has shaped the self) and enculturation comprehension (the degree to which the individual *understands* this influence). The consistent relationships between the EAS subscales and selected criterion measures add to the validity of the EAS factor structure, with the Enculturation Consideration subscale being positively associated with adaptive identity
exploration measures and the Enculturation Comprehension subscale being positively related to identity clarity measures. This pattern of results supports the conceptualisation of the EAS construct as a combination of self-reflection and self-knowledge, where individuals reflect on and come to understand how culture has shaped their self-concepts.

Using a distinct sample, the second study confirmed the two-factor model of EAS – replicating the two subscales of Enculturation Consideration and Enculturation Comprehension. This configuration was supported by the differential relationship between EAS and the Self-Reflection and Insight Scale - with self-reflection being more strongly related to enculturation consideration than enculturation comprehension and likewise, insight showing a stronger association with enculturation comprehension than with enculturation consideration, providing further evidence for the structural and construct validity of the EAS.

Lastly, in extending the nomological network of the EAS construct, the second study examined the relationship between both subscales and a constellation of theoretically related constructs of perceived agency, empathy and positive psychological outcomes. Mirroring the pattern of results from the earlier qualitative research, the findings indicated that higher levels of enculturation awareness (captured by enculturation comprehension) were positively associated with higher levels of perceived agency (perceived control of internal states and value autonomy), suggesting that individuals who have gained some insight into cultural influences on the self also tend to perceive themselves as being actively engaged in directing their psychological processes. Further replicating the qualitative data, the results showed that both enculturation consideration and enculturation comprehension were positively associated with the tendency for individuals to consider other points of view (perspective taking) and a heightened sensitivity for the experiences of others (empathetic concern). This finding suggests that individuals who have a greater awareness of themselves are also likely to have developed a greater awareness for the thoughts and feelings of others. Finally, in accordance
with the established positive association between identity clarity and positive psychological outcomes – both the EAS subscales were positively related to a measure of subjective wellbeing (flourishing) and negatively associated with ethno-cultural identity conflict. The present findings, thus, largely support the conceptual framework of enculturation awareness, with the emergent results confirming the predicted relationships between the EAS and the selected variables.

**Research Contributions**

The produced results have important implications for our theorising concerning the dynamic between culture and the self-concept. Firstly - and perhaps most importantly – the current investigation has demonstrated that individuals vary in the degree to which they are aware of cultural influences on the self. This is an important finding as it challenges existing assumptions about the unconscious nature of enculturation. The current results do not necessarily negate the extant theory as it is still very much possible that people negotiate the dynamic between culture and the self-concept largely without conscious awareness. The results do, however, show that people are often aware of this influence and that varying levels of awareness have an impact on subsequent negotiations between one’s self-concept and culture.

In light of these findings, it is likely that enculturation awareness plays a significant role in the identity dynamics of acculturating individuals. The current research has shown that individuals who are more aware of cultural influences on the self are less likely to experience ethno-cultural identity conflict and are more likely to form well-integrated and coherent personal self-concepts. Enculturation awareness may therefore be an important factor in the development of bicultural identity integration (Benet-Martínez & Haritatos, 2005). More specifically, it can be argued that individuals who are more aware of cultural
influences on the self may be more able to resolve possible identity conflicts between their multiple cultural orientations and thus may be more capable of integrating them successfully into their personal self-concepts. Similarly, individuals who are less aware of how culture has come to shape their self-concepts may also be unaware of the possible conflicting cultural identifications and as such, continue to experience an internal dissonance between their various cultural identifications, resulting in identity confusion and instability. Alternatively, it may be the case that individuals with relatively low enculturation awareness do not experience identity conflict as they remain oblivious to any contradictions between their cultural orientations and, as such, the EAS may have a curvilinear relationship with levels of bicultural identity integration.

It is important to consider, however, that perceived agency may be a mediating variable between one’s level of enculturation awareness and subsequent identity outcomes. As already mentioned, research has shown that self-awareness is considered to be at the foundation of one’s sense of personal agency (Bandura, 1989; G. Dimaggio et al., 2009). Indeed, the present results show a positive association between higher levels of enculturation awareness (enculturation comprehension) and levels of perceived agency. It is, therefore, reasonable to propose that becoming aware of cultural influences on the self-concept may empower individuals to take a more active role in directing this influence (Yoder, 2000), and that it is this heightened sense of control that leads to more positive psychological outcomes. This pattern of proposed relationships converges with recent research that has shown that more agentic (and arguably more conscious) approaches to acculturation are associated with identity clarity and coherence, and that more passive (and hence less conscious) approaches are associated with identity confusion (Schwartz et al., 2013)

Aside from influence of enculturation awareness on cultural identification, the present results also suggest that developing a greater awareness of cultural influences on the self may
play a significant role in an individual’s sociocultural adjustment during acculturation. More specifically, the present findings revealed that the EAS was positively associated with measures of perspective taking and empathetic concern – which have been found to positively predict functional social relationships (Davis, 1983). It is, therefore, possible that one’s level of enculturation awareness may play an important role in the development of bicultural competence - that is, the acculturing individual’s capacity to interact and function successfully within multiple cultural contexts (LaFromboise, Coleman, & Gerton, 1993). It is reasonable to propose that the development of one’s own enculturation awareness may not only advance one’s own self-knowledge, but that it may also enable that individual to better understand how culture has shaped the perceptions and identities of others – enabling him or her to form better cross-cultural relationships. Thus, individual levels of enculturation awareness may significantly influence the psychological and sociocultural adjustment of acculturating individuals.

Extrapolating on the above arguments, it is also feasible that enculturation awareness may significantly influence ethno-cultural identity development. The current results indicate that higher levels of enculturation awareness are associated with more adaptive approaches to identity exploration. Thus, it is conceivable that individuals who are more aware of the ways in which culture has come to shape their self-concepts may also be in a better position to identify and reconcile any conflicts between their personal self-perceptions and the identity options endorsed by their sociocultural environment (Yoder, 2000), which enables them to come to firmer identity commitments. In support of this argument, the results indeed show a positive association between enculturation comprehension and identity commitment – suggesting that individuals with higher enculturation awareness are more likely to have come to more stable decisions concerning their cultural identifications.
This proposition is bolstered by the reverse pattern of results where the EAS was found to be negatively associated with a more maladaptive, cyclical approach to identity exploration. Such findings suggest that individuals who are less aware of cultural influences on the self may be more likely to meander from identification to identification, not being able to make firm identity commitments as they reflexively ‘react’ to their context – resulting in feelings of identity inconsistency and confusion.

Once again, however, it may be the case that agency is a mediating variable between levels of enculturation awareness and adaptive identity exploration – where being aware of cultural influences on the self empowers individuals to engage in more purposeful identity exploration. This is of great importance as research has shown that more agentic approaches to ethno-cultural identity exploration are associated with firmer identity commitments; whereas more passive, undirected approaches to identity exploration are associated with identity confusion and instability (Berzonsky & Kuk, 2000; Berzonsky, 2003; Syed et al., 2013). Hence, enculturation awareness may significantly influence one’s likelihood of engaging in more agentic and adaptive identity exploration.

Limitations

Although the present study has produced encouraging results, there are nevertheless limitations to the current investigation that constrain our current knowledge of the enculturation awareness construct. Firstly, the cross-sectional nature of the two studies prevents us from evaluating the directionality of the emergent relationships. It is still unknown whether enculturation consideration precedes enculturation comprehension, or whether higher levels of enculturation awareness are an antecedent to or an outcome of higher levels of perceived agency, empathy and positive psychological outcomes. Although the paper presents theoretical justifications for the proposed relationship between these
variables, only future longitudinal research can empirically ascertain the directionality of these associations.

Secondly, the particular cultural-make up of both of the used samples confines the interpretation of the results to multicultural, English speaking nations. Cross-cultural replication of the EAS factor structure as well as its relationship with aforementioned variables would greatly enhance our understanding of how enculturation awareness relates to background variables such as cultural context, country of origin, residential status and ethnic group status. It is recommended that future studies undertake a cross-cultural examination of the EAS in order to assess the dynamics of enculturation awareness in cultural contexts that differ markedly from the present samples, such as less multicultural nations that hold more assimilationist acculturation preferences towards cultural diversity.

The third notable limitation lies in the fact that the present findings have been derived from self-report measures which often fail to capture more nuanced aspects of psychological constructs. Although the convergence between the qualitative and quantitative data adds to the validity of the results, a more experimental approach would be of use as it could potentially evaluate how varying levels of enculturation awareness implicitly manifest in one’s attitudes and behaviours.

**Future Research**

In order to address some of the aforementioned limitations, as well as to better establish the EAS as a relevant psychological construct, future research is needed that can help verify and expand on the current theorizing regarding enculturation awareness.

Perhaps the most needed future step is the examination of enculturation awareness through the use of longitudinal methodologies. Such research would not only be able to empirically examine the prediction that enculturation consideration *precedes* enculturation
comprehension, but would also be useful in observing the relationship between enculturation awareness and other developmental factors over time. Indeed, longitudinal data would enable us to assess whether enculturation consideration follows similar developmental patterns to identity exploration and, through the use of structural equation modelling techniques, whether enculturation awareness predicts greater identity clarity and commitment. Similarly, such techniques should also be used to test the aforementioned potential relationships between enculturation awareness and acculturation variables - examining whether greater enculturation awareness, indeed, predicts bicultural competence and bicultural identity integration. Importantly, such future investigations should include the role of ‘perceived agency’ within these models, as there is reason to believe that the relationship between enculturation awareness and subsequent identity outcomes is mediated by the increased sense of perceived control over cultural influences on the self.

Aside from the confirmation of the proposed relationships, future investigations are also needed for the purposes of examining how enculturation awareness relates to important demographic factors and whether scores on the EAS show significant group-level differences. For example, research has found that ethnic minority individuals are more likely to engage in ethnic identity exploration than ethnic-majority individuals, as the contrast between their ethnic heritage and the dominant culture increases the saliency of their cultural identifications (Phinney, 1992, 1996; Umaña-Taylor & Shin, 2007). It is, therefore, reasonable to suggest that future studies may find that ethnic minority individuals exhibit higher overall EAS scores compared to the ethnic-majority counterparts, due to the their increased likelihood of engaging in ethnic identity exploration.

Following on from this proposition, research has also shown that identity exploration is more likely to occur during transitional life changes (such as attending college and moving out of home), where individuals are often faced with a range of new (and often contrasting)
perspectives (Syed & Azmitia, 2009). Future research should, therefore, test whether individuals who frequently engage in such life-changing behaviours (such as emerging adults and recent migrants), show greater enculturation awareness than native born and older cohorts.

Lastly, it is important to note that, although the EAS is focused on the degree to which individuals are aware of cultural influences on the self, the scale has the potential for adaptability, where the word ‘culture’ could be replaced with other variables that are considered to be influential on identity development, such as one’s religion, nationality, gender or occupation. Thus, the current investigation opens up the possibility of examining how one’s level of awareness of their identification processes more generally may impact subsequent identity outcomes. For example, it is possible that being aware of relatively static influences on one’s identifications (such as one’s gender) may less associated with agency than more fluid variables (such as culture or occupation). Alternatively, it is possible that being aware of the process of identity development in of itself empowers individuals with a sense of ownership and agency over their identifications, irrelevant of the source of influence. Future research can, thus, utilise the EAS as a template for examining the dynamic between an individual’s level of identity awareness and various contextual factors that influence identity development.

**Conclusion**

To conclude, the present investigation has advanced the theorising on the novel construct of enculturation awareness through the development of the EAS, a measure specifically designed to capture the degree to which individuals have considered and come to understand how culture has shaped their personal self-concepts. Results have not only provided support for the validity and reliability of the EAS, but have also enabled us to
situate enculturation awareness within a wider psychological literature. Indeed, the findings suggest that being aware of the ways in which culture has shaped oneself may be applicable for both acculturative and developmental research as it can add to our understanding of the interplay between cultural environments and the development of personal self-concepts.
References


Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review: An


Appendices

Appendix A

Initial 22-Item Enculturation Awareness Scale

Culture is something that we all have but experience in different ways. The following survey therefore assumes a broad definition of ‘culture’, which includes: ethnicity, nationality, continental history, religion, spirituality and generational group.

In this section, we ask you to indicate how much you ‘agree’ or ‘disagree’ with the following statements. Remember to answer in a way that represents the ‘real you’ rather than what you think you ‘should’ say. (Respondents will be presented with a 7-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree.’)

1. It’s difficult for me to say how my identity has been shaped by my culture (r)
2. I have thought about how my values have been shaped by my culture
3. I am unsure in what ways my culture has influenced my perspective of the world (r)
4. I have thought about how my culture has shaped the way I behave
5. I am aware of how my view of the world has been shaped by my culture
6. I occasionally perform cultural practices without thinking about the reasons behind them (r)
7. I am unsure how my culture has influenced the way I interact with others (r)
8. I have thought about how my perspective of the world has been shaped by my culture
9. I sometimes participate in my cultural traditions without really understanding the reasons behind them (r)
10. I am aware of the ways in which my culture has shaped my values
11. I am unsure in what ways my culture has influenced the way I think (r)
12. I have considered how my culture has shaped the way I think
13. It’s hard for me to say how my values have been influenced by my culture (r)
14. I understand how my thinking has been shaped by my culture
15. I am aware of the ways in which my culture has shaped how I interact with others
16. I am unsure in what way my values have been influenced by my culture (r)
17. I have thought about how my identity has been shaped by my culture
18. I understand how my culture guides my behaviour
19. I know how my culture has shaped my identity
20. It’s hard for me to say how my culture has shaped the way I think (r)
21. I have considered how my view of what is ‘right and wrong’ has been shaped by my culture
22. I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture (r)

(r) = Reverse scored.
Appendix B

Final 11-Item Enculturation Awareness Scale

Culture is something that we all have but experience in different ways. The following survey therefore assumes a broad definition of ‘culture’, which includes: ethnicity, nationality, continental history, religion, spirituality and generational group.

In this section, we ask you to indicate how much you ‘agree’ or ‘disagree’ with the following statements. Remember to answer in a way that represents the ‘real you’ rather than what you think you ‘should’ say. (Respondents will be presented with a 7-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree.’)

1. It’s difficult for me to say how my identity has been shaped by my culture (r)
2. I have thought about how my values have been shaped by my culture
3. I am unsure in what ways my culture has influenced my perspective of the world (r)
4. I have thought about how my culture has shaped the way I behave
5. I have thought about how my perspective of the world has been shaped by my culture
6. I am unsure in what ways my culture has influenced the way I think (r)
7. I have considered how my culture has shaped the way I think
8. It’s hard for me to say how my values have been influenced by my culture (r)
9. I have thought about how my identity has been shaped by my culture
10. It’s hard for me to say how my culture has shaped the way I think (r)
11. I am unsure in what ways my perspective of ‘right and wrong’ has been influenced by my culture (r)

(r) = Reverse scored.
## Appendix C

### Correlation matrix between all of the variables in study I

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**Note:** N = 207, EAS = Enculturation Awareness Scale, EA-Con = Enculturation Consideration subscale, EA-Com = Enculturation Comprehension subscale, CIC = Cultural Identity Clarity Scale, CIE = Cultural Identity Exploration subscale, IDCC = Identity Coherence/Confusion Subscale, Ex-B = Exploration in Breadth subscale, Ex-D = Exploration in Depth subscale, Ex-R = Ruminative Exploration subscale, Ex-IDC = Identification with Commitment subscale, Ex-CM = Commitment Making subscale, SDS = shortened Social Desirability Scale, SCC = Self-Concept Clarity Scale. Bolded figures highlight relationships between the EAS and criterion measures. All figures represent a Pearson’s r correlation. *p < .05. **p < .01.
### Appendix D

Correlation matrix between all of the variables in study II.

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*Note: N = 307 for all scales with the exception of EIC (N = 51). EAS = Enculturation Awareness Scale, E-Con = Enculturation Consideration subscale, E-Com = Enculturation Comprehension subscale, EC = Empathetic Concern subscale, PT = Perspective Taking subscale, SWL = Subjective Well Being Scale, INS-SR = Insight and Self-Reflection Scale; INS = Insight subscale; SR = Self-Reflection subscale; PCIS = Perceived Control of Internal States Scale, FLR = Flourishing Scale; VA = Value Autonomy subscale; EIC = Ethno-Cultural Identity Conflict Scale. Bolded figures highlight relationships between the EAS and other related measures. All figures represent a Pearson’s r correlation. * p < .05. ** p < .01.*