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**THE RELATIONSHIP BETWEEN SELF-CONSTRUAL AND
PSYCHOLOGICAL AND SOCIO-CULTURAL ADJUSTMENT
OF ASIAN INDIAN INTERNATIONAL STUDENTS
STUDYING IN NEW ZEALAND.**

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ABSTRACT

New Zealand has experienced a dramatic increase in the number of Asian Indian international students undertaking study in this country in recent years, with the majority choosing a Polytechnic Institute to pursue their tertiary education. This phenomenon is part of a global trend which has encouraged a large body of literature describing international students' acculturation and adjustment experiences. However, as little research centres on Indian students, this study seeks to address in some way that gap by exploring the association between self-construal and socio-cultural and psychological adjustment of Indian international students to life in New Zealand.

A total of 39 Indian students, studying at Waiariki Institute of Technology, 63% of whom were males, completed an online survey. The survey comprised of a number of measures investigating the four hypotheses which explore student self-construal and adjustment and those factors that predict and mediate the adjustment of Indian students.

The findings of this study show that in spite of India being described as a collectivist and traditional family-centred culture, Indian students adopt a bicultural approach as early as six months after their arrival in New Zealand. They show positive levels of adjustment, with social connectedness and English language fluency having a partial mediating effect on the relationship between the horizontal-relational dimension of self-construal and psychological adjustment.

While there are a number of limitations to this study, the findings are encouraging and suggest that Indian students possess a number of attributes that facilitate their adjustment. The influence of the horizontal-collective dimension of self-construal on Indian students' adjustment highlights the importance of on-campus strategies to encourage the development of meaningful relationships among students which support ongoing adjustment to academic study and life in New Zealand.

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Table of Contents

ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES.....	vi
CHAPTER 1 - INTRODUCTION	1
1.1 India and Indian Migration.....	3
1.1.1 Understanding India.....	3
1.1.2 Indians in New Zealand	5
1.2 Understanding Self.....	5
1.2.1 What is Self?.....	5
1.2.2 Culture and Self.....	6
1.3 Theoretical Perspectives	7
1.4 Indian Self.....	9
1.5 The Cultural Syndromes.....	11
1.5.1 Individualism and Collectivism.....	12
1.5.2 Self-Construal.....	13
1.5.3 The Cultural Expression of Indian Selfhood	16
1.6 Acculturation.....	18
1.7 Adjustment.....	21
1.7.1 Psychological and Socio-cultural Adjustment.....	21
1.7.2 Social Connectedness.....	25
1.7.3 Language Competence/Confidence	27
1.8 Overview of the Current Study	28
CHAPTER 2 - METHOD.....	30
2.1 Participants	30
2.2 Procedure.....	31
2.3 Measures.....	32
2.3.1 Sixfold Self-Construal Scale	32
2.3.2 Revised Sociocultural Adaptation Scale	34
2.3.3 Shortened Affectometer 2 Scale	35
2.3.4 Social Connectedness Scale-R	36
2.3.5 English Language Confidence Scale	36
2.3.6 Standard English Score.....	37

2.3.7	Demographics	38
CHAPTER 3 – RESULTS.....		39
3.1	Descriptive Statistics	39
3.2	Measures.....	40
3.3	Normative Comparisons	42
3.4	The Self-Construal of Indian students.....	46
3.4.1	Four Dimensions of Interdependent Self-Construal versus Independent Self-Construal	48
3.4.2	Merged Interdependent and Independent Self-Construal	51
3.5	Socio-cultural and Psychological Adjustment	52
3.6	Bicultural Self-Construal and Adjustment.....	56
3.7	Social Connectedness and English Confidence as Mediating Variables	57
CHAPTER 4 - DISCUSSION.....		61
4.1	Indian International Students' Self-Construal.....	61
4.2	Adjustment.....	65
4.2.1	Socio-cultural Adjustment	65
4.2.2	Psychological Adjustment	67
4.3	Biculturalism	70
4.4	Limitations.....	72
4.5	Opportunities for further Research	74
4.6	Implications for Practice	75
REFERENCES.....		77
Appendix A: Information Cover Sheet		87
Appendix B: Survey Scales		90

LIST OF TABLES

Table 1: <i>Range, Mean and Standard Deviation of Research Variables, 95% Confidence of the Means and Alpha Reliabilities of the Measures</i>	41
Table 2: <i>Normative Comparisons of the Sixfold Self- Construal Scale</i>	43
Table 3: <i>Normative Comparisons of the Social Connectedness Scale and the English Language Confidence Scale</i>	46
Table 4: <i>Comparison of Mean Differences between the Four Dimensions of Interdependent Dimensions and Independent Self-Construal</i>	48
Table 5: <i>Comparison of Mean Differences between Gender and Self-Construal of Indian Students</i> ..	49
Table 6: <i>One-way Analysis of Variance for the Effects of Self-Construal on Length of Stay in New Zealand</i>	50
Table 7: <i>One-way Analysis of Variance for the Effects of Self-Construal on Students' Home State of Origin</i>	51
Table 8: <i>Merged Interdependent Self-Construal Scores Comparing all Interdependent Dimensions and the Relational and Collective Dimensions with Independent Self-Construal</i>	52
Table 9: <i>Correlations between Socio-cultural Adjustment and Psychological Adjustment and Vertical-Relational, Horizontal Relational, Vertical-Collective and Horizontal-Collective Self-Construal</i>	53
Table 10: <i>Predicting Socio-cultural Adjustment from the Interdependent and Independent Dimensions of the Sixfold Self Construal Scale</i>	54
Table 11: <i>Predicting Psychological Adjustment from the Interdependent and Independent Dimensions of the Six-Fold Self Construal Scale</i>	55
Table 12: <i>Correlations between Predictor Variables: Interdependent and Independent Self-Construal Dimensions, Outcome Variables: Socio-cultural Adjustment and Psychological Adjustment and Mediation Variables: Social Connectedness and English Language Confidence</i>	58
Table 13: <i>Mediating Effects of Social-Connectedness on Self-Construal Dimensions with Significant Correlations between Predictor, Outcome and Mediating Variables</i>	59
Table 14: <i>Mediating Effects of English Language Confidence on Self-Construal Dimensions with Significant Correlations between Predictor, Outcome and Mediating Variables</i>	60

CHAPTER 1 - INTRODUCTION

The world has witnessed a dramatic increase in migration of international students in just over 25 years, increasing from 0.8 million in 1975 to 4.5 million in 2012, with numbers doubling more recently between 2000 and 2012 (Organisation for Economic Co-operation and Development (OECD), 2014). The OECD offers some insights into the global trends associated with international students. The 21 European Union (EU) countries collectively host the most foreign students with many travelling within the continent to further their study. Outside Europe, the United States has traditionally and continues to be the most popular destination for many international students (16%). While New Zealand attracts 2% of the global migration of students, it is among a small group of countries that have the highest percentage (approximately 10%) of international students contributing to the country's entire tertiary population (OECD, 2014).

The highest numbers of international students travel from Asia (53%) with most coming from China, India and Korea (OECD, 2014). This global trend in students seeking educational opportunities beyond their homelands has captivated research attention for several decades, most of which has centred on the experience of Asian students in the United States. Cross-cultural inquiry has only recently shifted focus to understand the experiences of a more diverse cultural mix of sojourning students studying in locations across other continents.

The work of Berry and associates (Berry, 2006a; Berry, Kim, Minde, & Mok, 1987; Berry & Sam, 1997) provides a useful framework to understand migrant acculturation patterns and adjustment to a host culture. Developing a bicultural identity which signifies accommodation of and competence within the heritage and host cultures (Nguyen & Benet-Martínez, 2013) supports adjustment within a foreign environment (Ward & Kennedy, 1994).

Studies of international students undertaken by Ward and colleagues (Searle & Ward, 1990; Ward & Kennedy, 1993a, 1994, 1999) have contributed greatly with the elaboration of their theoretical

model describing psychological and socio-cultural adjustment. Their model has been widely used among differing cultural groups and repeatedly provides evidence that a bicultural approach supports enhanced adjustment of international students (Ward & Kennedy, 1994). Alternatively, acculturative stress has been linked with negative mental health outcomes, with the level of stress predictive of mental illness (Hwang & Ting, 2008).

The passage towards adjustment is influenced by factors associated with both the migrant group and the host country. International students face additional difficulties as they often struggle with homesickness, a loss of usual social supports during the adjustment period and language difficulties which all act as a barriers to developing meaningful friendship networks (Yeh & Inose, 2003).

Becoming bicultural may in fact be related to the way in which a student's culture of origin shapes their view of the world. The culturally determined patterns of individualism and collectivism described by Hofstede (1984) as shaping the national level differences observed in social practices, also occur at an individual level and are revealed in the construction of self and the psychological processes that form self-systems (Markus & Kitayama, 1991). Independent and interdependent self-construal describe differences in relational patterns of behaviour and account for the way individuals interpret, understand and connect within society.

Asian Indian students (referred to hereafter as Indian students) arrive from a cultural background with a rich history and traditional practices that encourage a relational self (Kakar, 2012). Socialisation within this context scripts a unique culturally determined self-way and produces a strong collectively-oriented identity that is vastly different from that seen in most countries that become study destinations for Indian students. A recent study revealed self-construal has a bearing on international students' adaptation and adjustment to a foreign culture (Shim, Freund, Stopsack, Kämmerer, & Barnow, 2014). This may be a significant finding for the growing number of Indian students choosing New Zealand as destination for further study as little is known about their sojourning experience.

Each of these areas will be discussed in more detail to understand factors that have a bearing on students settling into a social environment that is often vastly different to their homeland. It is important to examine Indian students' culture of origin to gain an appreciation of the impact this has on self-construal and adjustment.

The next section will briefly position Indian students within the New Zealand academic context and provide an overview of the sub-continent that geographically defines India.

1.1 India and Indian Migration

1.1.1 Understanding India

India is the second largest country in Asia with a population of over 1 billion. Its civilisation is among the oldest in the world dating back over 5000 years with migration, invasion and colonisation all contributing towards populating the Indus valley, producing a rich tapestry of diverse ethnic cultural influences in one geographic area (Medora, 2007). While four main religions co-exist in India, the Hindu religion emerged as the dominant socio-cultural influence imposing a profound effect on Indian identity and the construction of self in Indian society (Kakar, 2012). The ancient traditions contained in the Advaita Vedānta, a set of sacred texts, are seen as the spiritual basis of Hindu society and the Indian way of life (Paranjpe & Rao, 2008). The Bhagavad Gita, the most well-known of these texts, speaks of life as being a transition; a soul never dies but is reborn until it escapes this cycle through reaching perfection and salvation (Misra, 2001). The text emphasises spiritual attainment and self-transformation as the goal of all human activity (Roland, 1988), stating this is achieved by observing prescribed practices and by renouncing the physical self and worldly pursuits to reach a higher state (Bharati, 1985).

Contained within the Hindu way are the well-defined and important social institutions of the family and *Jati* or caste, both of which reflect the hierarchical ordering deeply ingrained within Hinduism and imposing an enduring effect on Indian identity (Kakar, 2012). The Indian family is a traditional,

extended family structure with norms that dictate roles and responsibilities of members (Kakar, 2012). *Jati* is a social institution consisting of five discreet levels, with membership determined by birth. Each one has its own norms and practices defining the 'right way to act' deeply imbedded in the Indian psyche (Kakar, 2012).

In spite of a long history of invasion, India has never achieved cultural fusion but remains a heterogeneous group of regional sub-cultures with their own traditions and languages. Within this kaleidoscope of cultures unity is said to occur through the 'engulfing influence' of Hinduism producing 'cultural co-existence' (Sinha & Tripathi, 1994). This harmony in the midst of diversity contributes towards the often described Indian ability to tolerate and accept contradictions and opposites (Sinha & Tripathi, 1994). A period of 200 years of colonisation by the British has served to strengthen Indian identity, a counter response to the British denigration of indigenous ways (Roland, 1988). Exposure to Western ways and the English language have left an imprint on Indian selfhood and society, and are considered to be important influences in the acculturation of Indian migrants (Kumar & Nevid, 2010).

While over 70% of India's population continues to live in rural villages, the family remains central to Indian social identity in both rural and large urban settings (Tripathi, 2005). In spite of the effects of modernisation being felt across India encouraging more individualistic practices, the traditional focus on the family has not diminished (Sinha, 1988c) and continues to give rise to a uniquely Indian identity that is immersed in a familial and spiritual self (Roland, 1988).

These influences contribute towards a unique understanding of self in the Indian psyche. How self is understood and constructed will be further examined with attention given to how this occurs within a Hindu Indian cultural framework.

1.1.2 Indians in New Zealand

The first Indians recorded in New Zealand arrived towards the end of the 19th century as temporary migrants to work but by 1920 around 200 permanent settlers are recorded (Swarbrick, 2012). Over the ensuing almost 100 years India has produced a steady stream of migrants to this country becoming the second-largest Asian ethnic group with 155,178 claiming Indian ethnic identity in the 2013 Census (Statistics New Zealand, 2014), 67,176 of whom were born in India (Swarbrick, 2014). A significant migration has occurred in recent years with a 68.2% increase in Indians arriving between the 2001 and 2006 census recordings followed by a further increase of 48.4% reported in 2013 census data (Statistics New Zealand, 2014).

New Zealand remains a popular destination for many Asian students with those from India responsible for the greatest increase in international enrolments across the educational sector in recent years. In 2012, the 11,349 Indian students studying in New Zealand had become the second largest international student group (New Zealand Education, 2014); the only ethnic group to grow significantly during the 2006-2012 period with an increase of over 300% in enrolments (Ministry of Education, 2013). Within the tertiary sector, technical institutes receive 25% of Indian student enrolments compared with approximately 10% studying at our universities (Ministry of Education, 2013).

1.2 Understanding Self

1.2.1 What is Self?

While interest in self can be traced back to early Greek philosophers recent theorists have expressed that self-knowledge and a sense of identity are important to wellbeing and give meaning to an individual's past, present and potential future (Gergen, 1971).

Self is a 'social product' constructed through interactions with others (Markus & Cross, 1990) and shaped by an individual's experience of their world (Higgins, 1996). Baumeister (1998) describes self as possessing three dimensions: the conscious awareness of being in the world, engaging in interpersonal interactions and having executive capacities to manage within the world.

The second dimension is the focus of this study which will seek to understand how the unique socio-cultural framework that shapes the Indian selfhood influences cross-cultural interactions.

A person's understanding of who they are and how they see themselves is described as their self-concept (Stets & Burke, 2003). An individual's self-concept consists of a collection of identities that facilitate meaning-making within a social context and guides behaviour (Oyserman, Elmore, & Smith, 2012). Socialisation processes play an important role in the development of these individual identities and self-systems producing culturally constructed patterns associated with relating to others 'to become a socially competent being' (Kagitcibasi, 1990). These internalised meaning systems are embedded from early childhood as cultural schemas or frames and serve as a set of shared understandings about self and the expected roles and responsibilities of individuals with their social network (Stryker & Burke, 2000).

Identities were once thought to be stable, however they are understood to fluctuate in response to contextual cues associated with the different settings associated with everyday life (Oyserman et al., 2012). While individuals are considered to have a dominant self that is 'chronically accessible' allowing them to operate with ease in their usual settings, reframing identities enables individuals to adjust to membership of multiple groups within society (Oyserman, 2011). This malleable capacity of the self is called into action in the process of transitioning to a new environment.

1.2.2 Culture and Self

Culture plays an important role in the formation and expression of self-systems and identities (Morf & Mischel, 2012). It underpins the socialisation practices that shape self-systems through a process of enculturation and ensures that the norms and beliefs of a society are transmitted across the generations (Cross & Gore, 2012). Shweder (1990) describes culture and self as being mutually constituted whereby an individual contributes to the culture that shapes their self-systems by maintaining accepted norms, values and social practices. The meaning-making system that guides the way an individual interacts with their social environment and determines 'Who I am', reflects the cultural differences in the construction of self (Triandis, 1989).

Ontological differences in the conception of self or what it means 'to be' underpin the widely reported differences between the western and non-western representations of self (Marsella,

DeVos, & Hsu, 1985). The western tradition arises from the Cartesian duality of separateness and 'self-objectification' which values autonomy, individual rights and personal fulfilment (Johnson, 1985). Misra (2001) describes the 'self located in "I" ', highlighting that progress towards individuation is a measure of maturity (p. 2). In contrast, eastern philosophies embrace a monistic view of self and promote self-renunciation or self-transcendence as pathways towards enlightenment (Ho, 1995). This world view espouses a 'we' focus in which the self is inseparable from the group (Sinha, 1982).

The cultural scripts that define accepted norms and practices are transmitted via childrearing patterns, social institutions and language. They become 'taken for granted' social representations of self that define accepted and expected behaviours and ways of being within a society (Quinn & Holland, 1987). In western societies children are socialised towards independence, personal responsibility and protection of individual rights (Johnson, 1985), whereas in eastern cultures, socialisation focuses on interconnectedness among the social network, maintaining harmonious relations and attending to the needs and expectations of group members (Oyserman & Markus, 1998).

1.3 Theoretical Perspectives

Social identity theory provides a springboard to examine the dynamics associated with self and the acculturative challenges faced by migrants. Social identity theory suggests that membership of a social network leads to the development of an identity that equips members with knowledge about expected roles, norms and behaviour of the group (Stryker & Burke, 2000). However, an important aspect of the migrant's journey involves the renegotiation of self and identity which evolves during the process of adapting to a new cultural environment. Ideally a new bicultural identity emerges through the acculturation process and requires the formation of new cultural scripts to guide

conduct that is consistent with the norms, values and self-systems of the dominant culture (LaFromboise, Coleman, & Gerton, 1993).

Self-categorisation theory (Tajfel & Turner, 2004) and cultural frame shifting (Benet-Martínez, Leu, Lee, & Morris, 2002) are two alternative approaches suggested to explain the way in which new multi-cultural identities emerge as migrants acquire the skills necessary to negotiate an unfamiliar social setting. As migrants demonstrate competence in a second culture they switch frames to activate aspects of their new identity in response to culturally specific cues associated with the dominant culture (Hong, Wan, No, & Chiu, 2007). This ability to switch cultural frames enables the migrant to activate identities based on categorisation with a group, either within the dominant or heritage cultures, and to comfortably accommodate the demands of the various cultural contexts (Brewer, 1991).

When making cross-cultural transitions the uncertainty of a novel environment may lead migrants to be torn between their own ethnic identity and an emerging national identity, resulting in identity conflict (Baumeister, Shapiro, & Tice, 1985). However, rather than being seen as detrimental, possessing a strong personal and ethnic identity and an ability to manage ambiguity are positive resources that acculturating migrants can draw on during a period of transition to manage identity conflict (Leong & Ward, 2000). A study of predominantly Indian, Southern Asian adolescents growing up in New Zealand, shows that a strong ethnic and national identity are protective resources for migrant populations (Stuart & Ward, 2011).

Belongingness and feeling connected within society are associated with social identity theory and self-categorisation theory (Tajfel & Turner, 2004) and are factors integral to the successful adjustment of international students (Yeh & Inose, 2003). Being able to fit-in and belong requires individuals to bring into play the identities that are consistent with a context. How this occurs for Indian international students will be examined but firstly, a brief glimpse into the Indian world is required to understand factors that are instrumental in forming the Indian identity.

1.4 Indian Self

Unravelling the construction of self in Indian culture is a complex process that requires appreciating the influence of religious philosophies on thought and action, the role of the family and the historical influences of colonisation that have all contributed towards fashioning a strong cultural identity.

An overarching spiritual self (Roland, 1988) inspired by sacred Hindu texts describes personhood or *Jiva* as a five layered construct with the true self, a metaphysical entity at the centre and successive outer layers containing consciousness, cognitive and physical states (Bharati, 1985). Consistent with Hindu traditions, self is hierarchically ordered with the metaphysical self of Brahman or *ātman* (Absolute One), a pure God-like entity, considered the highest level of human attainment and consciousness (Paranjpe & Rao, 2008). The lower elements of personhood are regarded as unclean or polluted (Bharati, 1985) and are to be mastered and subdued as they are perceived as standing in the way of achieving *ātman* and perfection (Paranjpe & Rao, 2008). The lifelong goal of every Hindu is to direct their efforts in this life towards achieving perfection in order to gain salvation and escape the otherwise endless cycle of reincarnation that awaits in the afterlife (Taylor, 1948). This endeavour is supported by observance of *Dharma*, a moral code that sets out traditional duties and social responsibilities expected of each individual throughout life (Kakar, 1971). Added to this the doctrine of karma teaches personal responsibility for actions, as the consequences of these materialise during the present life or within a future reincarnation (Taylor, 1948). Achieving *ātman* becomes the focal point of existence. It is unique and integral to the Indian psyche and underpins all endeavours as well as the spirit-centred focus of Indian thought (Kumar, 2008).

With an array of spiritual, moral and relational codes to be observed the family has emerged as the primary social institution playing a dominant role in the construction of the Indian self acting as the guardian for the transmission of traditional knowledge and culture practices in Indian society (Kakar, 1971). The 'familial self' (Roland, 1988) or 'relational self' (Kakar, 2012) are cultivated by the dominance of the extended family in Indian society. Strong and enduring interdependent bonds are

laid down through childrearing practices that centre around a period of intense and prolonged mothering, described as creating a 'symbiotic' relationship (Roland, 1988). This close physical and emotional proximity focuses on indulging the needs of the infant and young child, delaying individuation (Kakar, 2012) which is perceived as an adaptive strategy (Roland, 1988) instilling in the child the traditional Indian values of filial piety, obedience, loyalty, responsibility and reciprocity towards family members (Kakar, 2012). Socialisation practices imbue in the child a resolute identity based on the collective prioritising 'we', 'us' and reciprocity (Sinha, 1982) to the extent that the collective are described as 'dividuals', members who are perceived as being indivisible from the group (Marriott, 1976). As a result this tightly interwoven in-group focus is said to produce an apparent selfishness or indifference towards others (Sinha, 1988a). Within this tight community the extended family also plays a central role in passing on cultural beliefs about connections with the cosmos, ancestors, and mythical beings of folklore which play an important role in the Indian psyche (Ibrahim, Ohnishi, & Sandhu, 1997).

The social self is built on traditions and historical influences that have served to craft a strong Indian identity. Extending beyond the family the Hindu system of *jati* (caste) establishes the individual's role and place in life (Mines, 1988). Each caste instils its own set of norms prescribing the right way for members to live and while less apparent in modern India, continues to exert a powerful influence on Indian identity (Kakar, 2012).

Colonisation, which resulted in the denigration of indigenous ways, became instrumental in the development of a strong ethnic identity as Indians were encouraged to take pride in and reassert their identity in the face of domination (Ibrahim et al., 1997). Retaining their identity is highly regarded by Indian migrants who seek to transplant their identity in an adopted country (Farver, Bhadha, & Narang, 2002) by actively pursuing enculturation of traditional norms and values among the next generation (Dhruvarajan, 1993). As a result it is said to produce a phenomenon whereby

migrant Indians appear to reinvent their identity in a foreign country (Dasgupta, 1998) and show an increase in their 'Indianess' (Farver et al., 2002).

The diverse historical influences that have crafted Indian selfhood have contributed towards a uniquely Indian 'paradoxical' self (Sinha, 1982) imbued with the ability to tolerate and integrate contradictions (Marriott, 1976). This allows the individual to contextualise and accommodate differing cultural views and integrate societal change (Sinha, 1988c). Economic development in India is bringing social change with emerging patterns of a nuclear family structure challenging the collective nature of the extended family unit. However, change is not seen as a threat to the influence of the family on the construction of the Indian self as traditional ways are being redefined rather than abandoned (Sinha, 1988b). While modernisation is impacting on traditional parenting strategies, traditional family norms remain strongly evident in child-rearing practices across all levels of Indian society (Tuli, 2012) and continue to be maintained by migrants in developed societies (Dasgupta, 1998; Farver et al., 2002).

Migration brings disparate cultures face to face with culturally constructed differences becoming apparent. In order to understand the way Indian international student's construction of self interacts with their adjustment to a foreign culture, it is necessary to briefly explore the cultural syndromes that highlight cultural differences and give meaning to the challenges that may present during the acculturation process.

1.5 The Cultural Syndromes

Culture constitutes not only what it means 'to be' in a society but how to behave within a given context (Misra, 2001). An accumulation of evidence substantiates Hofstede's widely reported constructs of individualism and collectivism as one approach to understand the differences observed in the culturally scripted ways people interact (Kagitcibasi, 1997). These differences have become collectively viewed as 'cultural syndromes' and are recognised as the differential effect that culture

has on members' psychological processes and generally accepted ways of interacting within a given society (Triandis, 1996). Enculturation is responsible for shaping these culturally specific understandings; a process that begins with the family but is further developed by social institutions and practices that are a part of ordinary life within a particular culture (Kitayama, Markus, & Lieberman, 1995). The 'cultural syndromes' of individualism and collectivism and their derivatives, independent and interdependent self-construal are core elements in the cultural construction of selfhood which has dominated psychological literature for over three decades.

1.5.1 Individualism and Collectivism

Hofstede (1984) popularised the understanding of individualism and collectivism as the cultural differences in social behaviour patterns observed in his landmark multi-national study involving over 40 countries. He describes individualism as societies in which individuals maintain loose connections with multiple groups and collectivism as those societies in which individuals are defined by their membership of close knit in-groups primarily based on kinship.

Individualism became synonymous with western cultures and more affluent societies with a predominantly nuclear family structure. Individualistic cultures are "I" focused, encouraging individuals to be autonomous, independent, and concerned about meeting their own needs and those of their immediate family (Hofstede, 1984). In contrast, Hofstede observed that those countries with lower levels of economic development, and traditional values that supported the maintenance of strong family ties, had predominantly collectivist cultures. He elaborated that emphasis was placed on an 'us' and 'we' focus with high levels of connectedness within the extended family group accompanying expectations of conformity, loyalty and harmony among members to promote the economic security and wellbeing of the group. Collectivist cultures prioritise the group over pursuit of individual goals (Hui & Triandis, 1986) with personal achievement seen from the perspective of benefitting the group (Sinha, Vohra, Singhal, Sinha, & Ushashree,

2002). In collectivist cultures, the in-group provides a sense of identity with duty and obligations binding members to share a common purpose and concern for each other (Triandis, 1995). However, concern is reserved for in-group members and does not extend to society, with the strength of in-groups bonds serving as an indicator of the level of collectivism (Hui & Triandis, 1986). Out-groups, alternatively, are those seen as being different, distant or considered to be a source of conflict (Triandis, 1995).

Triandis (1995) further refined the constructs by adding that societies could be better understood as being either horizontal or vertical expressions of individualism or collectivism, with horizontal communities emphasising egalitarianism within groups while those that are vertical, highlight hierarchy and differences. Individuals are capable of using all four possible constructions, however, a dominant pattern reflects the individual's culture (Triandis, 1996)

Kagitcibasi (1997) suggested that individualism and collectivism can be viewed in terms of the socialisation practices that underpin construction of self and interpersonal relatedness within a cultural community. With increased interest in understanding self that followed in the wake of Hofstede's study, the idea of private, public or collective selves was proposed by Triandis (1989) as a way to understand cultural differences in information sampling to inform social behaviour. However, it has been the conceptualising of independent and interdependent self-construal and their imprint on psychological processes (Markus & Kitayama, 1991) that has dominated the psychological literature exploring cultural aspects of self.

1.5.2 Self-Construal

Markus and Kitayama (1991) suggest that the broad cultural level differences of individualism and collectivism play an important role in the perception and expression of self. They describe the different self-ways as independent and interdependent self-construal which vary in the "degree to

which people see themselves as separate from others or as connected with others” (p. 226). Drawing together examples from a broad psychological research base, they conclude that an individual’s self-construal influences the psychological processes of cognition, emotion and motivation. These are shown to ‘vary markedly by culture’ reflecting at an individual level, the distinction of cultural level individualism and collectivism (Markus & Kitayama, 1991, p. 226). They conceptualise independent self-construal as one who is “a bounded, unique and more or less integrated motivational and cognitive universe” adopting Geertz’s (1975, p. 48) definition of a typical western individual. Such individuals are socialised within western cultures from an early age to become autonomous and independent, with activity directed towards focussing on achieving personal goals (Markus & Kitayama, 1991).

In sharp contrast, collectivist societies facilitate the development of an interdependent self-construal wherein the self is perceived as an extension of the group and only fully realised through relationships with significant others (Markus & Kitayama, 1991). Harmonious relationships that emphasise fitting-in and prioritising the needs of the group above self are valued and considered defining features of an interdependent self-construal (Markus & Kitayama, 1991).

A significant body of empirical studies has probed the usefulness of these two constructs in understanding culturally induced differences in self-systems over several decades. Opinion has been divided and evidence conflicting. Matsumoto (1999) criticised Markus and Kitayama’s claims of independent and interdependent self-construal as unfounded, pointing out that studies said to provide evidence supporting the constructs of self-construal were based on the national culture of individuals rather than an assessment of either construct. However, with the construction of dedicated measures evidence emerged that the constructs are authentic, and while the socialising culture influences the development of a dominant self-construal, both are understood to reside within the self (Singelis, 1994). Further, early studies revealed that priming temporarily evoked a non-dominant independent or interdependent self-construal in response to relevant stimuli

(Trafimow, Triandis, & Goto, 1991), a finding reiterated in numerous later studies and one of interest to those investigating migration, acculturation and adjustment. The understanding that self-construal was malleable is highlighted in a recent study showing that international students who have a strong independent as well as interdependent self-construal are better able to adjust to a new environment (Shim et al., 2014) adding further weight to the importance of biculturalism as an acculturative strategy.

While independence is accepted as a reliable construct, interdependence was considered too broad to be reliable as it failed to distinguish the relational patterns reported within collectivist cultures, and uncover evidence of a distinct relational self (Kashima et al., 1995). Cross, Hardin, and Gercek-Swing (2011) propose that interdependent self-construal is better understood by examining the sub-categories of the construct as relational and collective self-construal. In a study of East Asian in-group interactions relational self-construal was observed among those with close emotional connections while collective self-construal was considered as the relationship of an individual with the group (Yuki, Maddux, Brewer, & Takemura, 2005). Cross et al. (2011) suggest the failure to explore this distinction is considered one of the reasons for the lack of consistency of findings reported in self-construal research. Further, they add that the common practice of using individualism-collectivism and self-construal interchangeably in the literature to describe variations in self has fuelled confusion.

This practice is clearly evident in self-construal literature relating to Indians who are variously described as being both collectivist and individualistic and are regarded as possessing both self-images (Tuli & Chaudhary, 2010). Studies of Indian self-construal reveal what is described as a unique blend of strong individualistic tendencies co-existing with pronounced family-centred, collectivist orientations. This unconventional self-way will be explored further.

1.5.3 The Cultural Expression of Indian Selfhood

The dominant dual influences of Hinduism and the role of the family in Indian society contribute to India being considered a collectivist culture (Triandis, 1995) socialising individuals towards a predominantly interdependent self-construal. While India appears near the mid-point at 48 on Hofstede's (1984) individualism-collectivism scale, which ranges from 0 (strongly collectivist) to 100 (strongly individualistic), he described India as a collectivist culture due to the influence of the family, the caste system and the prevalence of poverty.

Triandis (1995) suggested that the hierarchical nature of Indian social institutions contributes towards Indians being vertical collectivists. Vertical collectivists sacrifice their own aspirations to conform with the needs of the in-group (Verma & Triandis, 1999). A preference towards vertical collectivism was demonstrated in a comparison between students from the United States and those from India, however, a within-group analysis of the Indians students revealed they perceived themselves to be more horizontal collectivists, emphasising similarity in a common in-group focus. This apparent contradiction is referred to often in the literature as the Indian psyche showing a 'tolerance for dissonance' and as the Indian way to contextualise, by adapting and modifying a position in accordance with the situation (Roland, 1988).

India has often been described as a "co-existence of dichotomies" (Mishra, 1994; Sinha & Tripathi, 1994) where Indians appear to walk in two worlds or the 'gray area' of apparent opposites (Sinha & Tripathi, 1994) possessing both individualistic and collectivist tendencies with the context determining which world or self-view comes to the fore (Verma, 1999). Traditional family values and the collective appear to frequently co-exist with a self that is goal and achievement oriented. Indians scholars refer to this juxtaposition as the Indian 'paradoxical self' (Sinha, 1982), a unique blend of independent and interdependent self-construal (Tuli & Chaudhary, 2010). While observed by others, it is also recognised by Indians themselves who identify with being both individualistic and collectivist (Kapoor, Hughes, Baldwin, & Blue, 2003).

Studies within India provide ample evidence of this paradoxical 'individualised familial self' found in the workplace (Gupta & Panda, 2003), where organisational hierarchy is welcomed alongside personal career advancement and achievement, among university students who are both relationship and goal-oriented (Misra & Giri, 1995), and emerging in the modern Indian home where parenting approaches encourage autonomy, family traditions and interrelatedness (Tuli & Chaudhary, 2010). It is similarly observed among young rural and urban adults of mixed socio-economic status whose intentions focus on familial needs but are at the same time, directed towards personal goals (Sinha, Sinha, Verma, & Sinha, 2001), and across three generations of families in a northern area of India, although weakening somewhat with aging (Mishra & Sinha, 2012). Within this dichotomy Sinha et al. (1994) identified that while traditional collectivist Indian values were common throughout India they were strongest in the northern regions of the country. Alternatively, higher levels of individualism are reported among university students (Sinha & Verma, 1994), in particular female university students, urban dwellers (Jha & Singh, 2011), in affluent areas (Sinha et al., 2002; Voronov & Singer, 2002) and among the more highly educated (Mishra, 1994).

The increasing evidence of individualism among women is attributed to the influence of increasing modernisation across India (Roland, 1988). In spite of growing numbers of women pursuing professional careers, the identity of the Indian woman continues to be strongly associated with a traditional role of the woman as a wife and mother in Indian society (Kakar, 2012). Hofstede and Hofstede (2005) suggest that increasing economic wealth and modernisation is associated with a shift towards individualism. In the case of India even the most modern Indian is shown to be collectivist among family while individualistic in pursuit of personal goals (Verma, 2001) and bicultural in the workplace (Inman, Howard, Beaumont, & Walker, 2007). The idea of a transitional self-evolving towards being westernised is rejected (Sinha, 1988c). Rather a redefined self articulates the Indian quality of context sensitivity and tolerance of opposites by combining the traditional with the modern giving rise to the notion of a unique Indian expression of an individualist/collectivist identity (Sinha, 1988c).

While there is a rich account of Indian self-construal and how this is manifest at home, there are only scattered accounts describing the experience of Indian students studying abroad, in spite of the large numbers who choose to further their academic careers in a foreign destination. A recent study revealed self-construal has a bearing on international students' adaptation and adjustment to a foreign culture (Shim et al., 2014). How this is understood in terms of Indian sojourners is largely unknown. The Indian experience has been aggregated among Asian sojourning students as a collective group which underestimates the heterogeneity of cultural backgrounds, contributing to contradictory and inconsistent findings (Yoon, Lee, & Goh, 2008). This approach fails to recognise the diverse and unique cultural influences that shape the construction of the Indian self. Does the paradoxical nature of the Indian self, contextual sensitivity and the influences that have shaped a blended self-construal assist Indian international students towards a smoother and more expeditious bicultural transformation? This study hopes to shed light on the question.

1.6 Acculturation

Acculturation is broadly understood as the individual and cultural changes arising from contact between differing cultures (Berry & Sam, 1997). Redfield, Linton, and Herskovits (1936) indicate that the "continuous first-hand contact" of different cultures leads to changes in both groups. All migrants, including international students sojourning in a foreign country to further academic study, are faced with resolving the conflict between embracing the host culture and retaining their heritage culture (Berry, 2003). Berry's (1990) well known bi-dimensional acculturation framework describes four strategies to resolve this acculturation conflict: integration, the most desirable of the four, results in a comfortable blend of both heritage and host cultures; assimilation involves embracing the host culture while relinquishing contact with the heritage culture; separation favours retaining the heritage culture while avoiding interaction with the host culture and finally marginalisation, which results in alienation from both groups.

Integration tends to be the preferred strategy for most migrants including sojourning international students (Berry, 2006a). This strategy produces most adaptive outcomes (Berry, 2005) with a greater sense of well-being (Zheng, Sang, & Wang, 2004) and more positive psychological and socio-cultural adjustment to the host culture (Wang & Mallinckrodt, 2006; Ward & Kennedy, 1994). Alternative strategies increase the risk of psychological distress and academic difficulties (Ward & Kennedy, 1994; Ward & Searle, 1991) particularly among students from Asian backgrounds (Noels, Pon, & Clément, 1996). More recent evidence reveals that assimilated East Asian students in Germany experience lower levels of depression than those favouring an integration approach, suggesting an initial increase in stress is experienced as students try to integrate (Shim et al., 2014). However, evidence continues to indicate that integration leads to more positive outcomes for international students (Stuart & Ward, 2011) and acculturative stress, regardless of the strategy adopted, presents a risk to mental health (Hwang & Ting, 2008).

Integration is closely associated with biculturalism, described as the ability to successfully integrate two cultures, with migrants able to confidently and competently navigate the demands of the host and heritage culture (Nguyen & Benet-Martínez, 2013). Biculturalism is understood to occur in two ways, either as the ability to shift cultural frames depending on contextual demands or as a result of cultural fusion, whereby the individual is able to integrate aspects of both cultures, and to move appropriately and with confidence within each context (Nguyen & Benet-Martínez, 2013). Among those who adopt bicultural strategies some will switch cultural frames in response to contextual cues (Verkuyten & Pouliasi, 2006) while others activate more complex processing skills in an attempt to avoid the internal conflict of being seen to be culturally inappropriate in any given context (Tadmor & Tetlock, 2006). The ability to assume an effective integration strategy predicts a migrant's potential to become bicultural (Verkuyten & Pouliasi, 2006).

A number of factors have been identified that facilitate the acculturation experience and impact on a migrant's ability to fit-in and feel at ease in their new environment. Multicultural societies that are

more tolerant of migrants create a supportive environment for newcomers (Berry, 2006a) and being a voluntary migrant permits a greater sense of control over the acculturation process, contributing towards a lower risk of negative outcomes (LaFromboise et al., 1993). While international students have the advantage of being a voluntary migrant group, they are recognised as having an additional set of acculturative challenges. Difficulties include adjusting to the demands of an unfamiliar academic environment (Misra & Castillo, 2004), homesickness (Sandhu & Asrabadi, 1994) and loss of connection with family support systems (Yeh & Inose, 2003) can present as significant challenges for international students adjusting as a student in another culture. These issues can magnify the challenge associated with settling into a new environment, but fortunately for many students the discomfort is often temporary as studies show a positive acculturation attitude among those who have lived in the host country for a longer period (Choi & Thomas, 2009; Ward & Kennedy, 1999). The transition is enhanced for those who are more highly educated as they appear better equipped with resources for coping and adjusting to an unfamiliar environment (Choi & Thomas, 2009).

Few studies target the acculturation of Indian international students. However, one study explored the use of various forms of media and its impact on the acculturation of Indian sojourning students in the United States. This study found that students' continued reliance on Indian media, most commonly online newspapers and movies, following their arrival in the host country is considered to act a barrier to integration (Raman & Harwood, 2008).

The outcome of acculturation is desirably an individual's successful adjustment to a new situation. A positive experience depends on a number of factors that relate to the migrant retaining their own identity while becoming culturally competent within the host country. These include feeling confident with the host language and social norms to build relationships and to negotiate systems within an unfamiliar environment (LaFromboise et al., 1993).

1.7 Adjustment

1.7.1 Psychological and Socio-cultural Adjustment

Research into international students' cross-cultural adjustment has been dominated by the experiences of Asian students sojourning in the United States. An extensive literature review undertaken by Zhang and Goodson (2011b) exploring the reports of international students and their acculturation experiences between 1990 and 2009, revealed over half of the studies sampled mixed groups of Asian students, while only one was dedicated to the experiences of Indian students.

The way international students adjust to life in another culture has been most consistently described by Ward and her colleagues using their theoretical model of psychological and socio-cultural adjustment (Searle & Ward, 1990; Ward & Kennedy, 1994, 1999). They explain that while related, these two dimensions of adjustment are distinct, with psychological adjustment measuring 'psychological wellbeing or satisfaction' and socio-cultural adjustment comprising a migrant's ability to 'fit-in' and to accommodate their new cultural environment (Ward & Kennedy, 1999). Psychological wellbeing is influenced by how well students cope with life changes, mood, homesickness and gaining the support of satisfying relationships within the host setting (Ward & Kennedy, 1993a) while socio-cultural adjustment measures a student's ability to acquire cultural knowledge and skills to comfortably negotiate the demand of the host culture (Ward & Kennedy, 1993b). This framework contributes towards a better understanding of sojourners' transition to a new cultural and academic environment (Ward & Kennedy, 1993b) and has been consistently applied across a number of ethnic populations by Ward and her colleagues (Searle & Ward, 1990; Ward & Kennedy, 1992, 1993a, 1993b, 1994; Ward & Kus, 2012; Ward & Searle, 1991) as well as others working in this field of inquiry (Zhang & Goodson, 2011b).

A broad category of factors contributes towards adjustment and influences the adjustment process. The factors that are most often reported as predicting how sojourners settle include the cultural distance between a student's ethnic culture and that of the host nation, psychological attributes that

influence 'cultural- fit', a student's capacity with the host language, the quality of host and heritage relationships impacting on levels of social support and social connectedness, the emergent acculturation strategy and the quality of psychological adjustment (Ward & Kennedy, 1993a). The process of adjustment and its impact on international students will be briefly explored.

While acculturation can offer many positive advantages for international students (Searle & Ward, 1990), a significant body of literature describes the experience as being initially unsettling and stressful for many students, but improving over time (Ward & Kennedy, 1999; Ying, 2003). The main stressors reported by students include difficulties involving language, the educational environment, personal finances and experiences of discrimination (Smith & Khawaja, 2011). Loss of the family and friendship networks contribute to significant levels of loneliness and homesickness (Poyrazli & Lopez, 2007). The literature shows that a strong relationship exists between acculturative stress and psychological distress (Wei, Liao, Heppner, Chao, & Ku, 2012), contributing towards increased evidence of psychological problems and depression among many international students (Mori, 2000). Yang and Clum (1995) report that Asian international students appear to experience a higher level of stress than non-Asian students and that depression is observed as a common symptom of distress among international students, in general (Constantine, Okazaki, & Utsey, 2004). However, the distress of Asian students often goes unrecognised as there is a tendency among this group to somatise problems (Mori, 2000). Distress is underreported in this group due to forbearance, a silent acceptance of problems, which is described as an Asian cultural phenomenon (Morling & Fiske, 1999) and results in students keeping problems to themselves rather than seeking help (Yeh & Inose, 2002). A related cultural practice that influences the help-seeking of Asian students concerns the reluctance of troubled individuals to be a burden to others or to share personal problems (Wei et al., 2012). Asian international students tend to favour indirect coping strategies that focus on re-orienting self rather than directly addressing problems (Cross, 1995) which further leads to concealment of distress and difficulties.

The marital status of students is reported as influencing acculturative stress, with those who are single describing lower levels of distress (Duru & Poyrazli, 2007). Married students cope with the additional responsibilities of parenting without the support of extended family and the isolation of an often housebound spouse who may lack opportunities for social interaction and may be unable to pursue their own career due to parenting and housekeeping responsibilities (Poyrazli & Kavanaugh, 2006).

Loss of familiar support structures and difficulties in establishing new relationships often add to acculturative stress leaving students feeling isolated (Yeh & Inose, 2003) and relying on the security of social contact with co-nationals which leads to poorer adjustment outcomes (Hendrickson, Rosen, & Aune, 2011). A higher level of satisfaction and wellbeing is observed among international students with a wider social network that includes both supportive co-national and host national friendships. Establishing and feeling connected to such a network advances adjustment as it builds resilience and protects against depression (Cheung & Yue, 2013).

Feeling connected abroad is influenced by the perceived discrepancy or distance between the norms and values of the host and heritage cultures, or 'cultural fit', a condition recognised as a predictor of psychological adaptation (Searle & Ward, 1990). The more significant the cultural discrepancy the greater the potential for psychological distress among the sojourning population (Ward & Chang, 1997) which further challenges a student's ability to socially integrate and fit-in. Social difficulty in transitioning to a new culture has been shown to be greater among sojourners possessing a strong ethnic identity (Ward & Kennedy, 1992), while the ability to integrate the ways of the host culture to cultivate a bicultural identity is shown to lead to greater wellbeing (Sawrikar & Hunt, 2005). Bicultural competence is determined by the ability of an individual to integrate both acculturation and enculturation processes in the host country (Kumar & Nevid, 2010) and has been specifically linked with more positive psychological and sociological adjustment outcomes among sojourning students (Nguyen & Benet-Martínez, 2013). Becoming bicultural is contingent upon being able to

build cultural knowledge and having an awareness of contextual cues to fluidly accommodate the demands of both the host and their own heritage culture (Cross, 1995). This capacity relies heavily upon the international student being fluent in the host language to become active and adept within their new environment (Yeh & Inose, 2003).

How Indian international students make the adaptive journey is largely unreported, which reflects the limited study of this group internationally. It is not obvious why this group appears to be largely overlooked in published literature to date, given their increasing global presence as international students. They appear to have remained under the cross-cultural research radar. The tendency to still see students from Asia as representing one geographic region, or Asian students as a convenient group from collectivist societies to compare and contrast with western individualistic nations, may explain the lack of focus on Indian students. Research indicates that in comparison with other Asian groups in the United States, Indian students report a more positive experience and are active in developing supportive social networks (Choi & Thomas, 2009); they have greater cross-cultural familiarity and English language fluency due to India's colonisation history which act as significant factors in reducing acculturative stress (Rice, Choi, Zhang, Morero, & Anderson, 2012). However, the pressure to perform well in the host country is especially high among Indian students which results in an increased incidence of depression (Rice et al., 2012). Buffering this to some degree is the tendency among Indian migrants to retain a cultural 'core' in their personal lives but adopt a bicultural approach in their professional lives which may serve to assist them to settle with greater ease in western cultures (Inman et al., 2007).

Retaining a strong ethnic identity, commonly seen among Indian migrants, receives mixed reviews. On the positive side increased life satisfaction (Stuart & Ward, 2011), better adjustment (Ward & Kennedy, 1992), higher levels of well-being and improved academic performance are reported (Neri & Ville, 2008). The social support that comes from fostering a strong ethnic identity is recognised as a protective factor for the mental health of Indian international students (Atri, Sharma, & Cottrell,

2006). However, poorer adaptive outcomes (Hendrickson et al., 2011), lower levels of adjustment over the longer term (Geeraert, Demoulin, & Demes, 2014) and less academic success (Neri & Ville, 2008) are linked with fostering an ethnic identity in the host country. The negative perspective suggests a tendency towards an assimilation or separation strategy. Alternatively, maintaining a strong ethnic identity while acquiring a host national identity is consistent with a bicultural identity and a positive adjustment experience (Stuart & Ward, 2011)..

The potentially conflicting cultural demands facing Indian international students may impact on psychological and socio-cultural adjustment (Yang, Noels, & Saumure, 2006) and patterns of bicultural identity formation within New Zealand society. Currently, how the adjustment experience unfolds for the growing number of Indian international students in New Zealand remains unclear.

1.7.2 Social Connectedness

Social connectedness is the individual's perception of feeling close to and at one with their social world (Lee & Robbins, 1995, 1998). A positive sense of connectedness among international students facilitates both an ability to engage in social activity and a willingness to form meaningful cross-cultural friendships with other students (Lee & Robbins, 1998). A broad social network, that includes both host and co-national peers, plays an important role in fostering cross-cultural understanding and reduces the risk of stereotyping, discrimination and social isolation (Duru & Poyrazli, 2011; Uskul, Hynie, & Lalonde, 2004; Williams & Johnson, 2011). A greater sense of wellbeing is experienced by international students who are actively socially engaged (Lee, Dean, & Jung, 2008), while those who remain isolated experience increased mistrust and poor self-esteem, which in turn contribute towards a general reluctance to participate socially (Lee & Robbins, 1998).

Within the education sector connectedness is recognised as positively contributing towards a stronger sense of identity and a constellation of benefits that include student motivation, academic achievement and a greater sense of wellbeing (Clement, 2010). Feeling socially connected has

important implications for sojourning students as those who develop relationships within the host and their own co-national communities have improved adaptive outcomes (Yeh & Inose, 2003).

Students who have an interdependent self-construal appear to face greater social challenges as shown in research of international students from diverse ethnic backgrounds studying in the United States. Those with an interdependent self-construal report having less social connections and higher levels of loneliness (Lee, Draper, & Lee, 2001). As interdependent self-construal is concerned with being connected with significant others and groups, social connectedness is considered to be of greater importance for individuals with this self-view than for those with an individualistic outlook (Yoon & Lee, 2010). However, ethnicity may play an important role in this area as Uskul et al. (2004) found that the interdependent self-construal of Turkish students in Canada did not act as a barrier to social connectedness. Their positive experience is attributed to increased exposure to Western ways in Turkey and a strong preference for both independent and interdependent self-construal. As India's past has equipped students with similar advantages, it may be possible to extrapolate that these same factors will enable Indian students to achieve a higher level of connectedness within New Zealand society.

Becoming bicultural suggests that the international student is able to develop networks and comfortably participate in both environments. This may be a challenge for Indian students. While they possess similar characteristics to Turkish students, retaining their 'core' cultural identity remains important for first generation Indian migrants (Inman et al., 2007). Conforming to traditional norms to foster and transmit cultural identity places an emphasis on co-national contact which may impede adjustment (Searle & Ward, 1990), while cultivating host national friendships encourages bicultural transformation (Kim, 2001). There are differing opinions on the importance of a co-national network. Among exchange students it is seen as important to support settling into a new environment but acts as a barrier to adjustment over the longer term (Geeraert et al., 2014),

while an Australian study of Asian international students found co-national friendships encourage connectedness on-campus and improved adjustment to life in Australia (Kashima & Loh, 2006).

Social connectedness and belongingness are related constructs. Baumeister and Leary (1995) point out that human beings are motivated by a sense of belonging situated in the need to form meaningful and enduring relationships. For international students a greater sense of belonging is associated with a number of positive effects that support student life and adjustment. It has been linked with academic success (Glass & Westmont, 2014; Hausmann, Schofield, & Woods, 2007), and plays an important role by protecting against the debilitating effects of homesickness which can undermine the adjustment process (Thurber & Walton, 2012).

1.7.3 Language Competence/Confidence

A consistent theme in acculturation literature reporting the international student experience is the role of English language confidence and fluency in levels of social connectedness and socio-cultural and psychological adjustment. Language issues are identified as one of the most common problems for international students (Mori, 2000) with unequivocal evidence showing that English language competence plays a key role in adjustment across differing international student populations and settings (Kashima & Loh, 2006; Uskul et al., 2004; Yang et al., 2006; Yeh & Inose, 2003).

A clear interrelationship exists between English language skills and social connectedness as they share a common influence on many aspects of the international student experience. English language competence is implicated in building supportive friendships (Duru & Poyrazli, 2011; Uskul et al., 2004; Yoon et al., 2008), improved academic performance (Poyrazli & Grahame, 2007) and increased levels of satisfaction and psychological wellbeing (Ying, 2003). Higher TOEFL scores, an assessment of language proficiency, are predictive of academic success (Stoyhoff, 1997).

While many international studies exist, little is known about the needs of specific ethnic groups studying in New Zealand. Butcher and McGrath (2004) identify that student difficulties include English language proficiency and understanding New Zealand communication styles, coming to terms with different teaching modes, understanding programme requirements and an apparent reserve about participating in the classroom. In a Canadian study of Turkish international students, the most common reason for academic failure was poor adjustment (Duru & Poyrazli, 2011). This emphasises the importance of feeling connected and having the language skills to develop supportive friendships and competency in the host language to meet the demands of life and academic study in a foreign culture.

1.8 Overview of the Current Study

For Indian students a strong emphasis on maintaining their heritage cultural identity (Farver et al., 2002) and a colonisation experience that exposed Indians to Western ways and the English language (Kumar & Nevid, 2010), are factors firmly imbedded in self-construal that may both hinder and facilitate adjustment to life in New Zealand. Most studies of international students looking at adjustment include samples of disparate groups in terms of ethnicity and length of stay in the mainstream culture. Few studies explore Indian international students as a group. For Indian students in New Zealand, does inherently possessing factors that are predictive of positive adjustment offer a stronger foundation for acquiring a bicultural identity? The literature would suggest this is so. However, most studies that include Indian students either as a group, or represented in samples of Asians students, are conducted in the United States, and we cannot be certain how well international findings translate to the New Zealand context.

As Indian international students represent a strong presence in New Zealand's tertiary institutions it is timely to consider how these students adjust to a culture that is so different from their own. This study aims to investigate the influence of self-construal on psychological and sociological adjustment

of international students studying in New Zealand. It is hypothesised student self-construal will have a direct effect on psychological and sociological adjustment to life and academic study in New Zealand. This study examines the following hypothesis:

- Based on the findings that India is seen as a collectivist society with strong family loyalties and a focus on retaining a strong ethnic identity, it is predicted that:

H₁ Indian students will possess a stronger interdependent than independent self-construal.

- Socialisation practices and historical influences combine to shape the self-systems within a culture. It is considered that:

H₂ The self-construal of Indian international students will predict their psychological and sociological adjustment.

- An integration acculturation strategy enables international students to become bicultural and successfully negotiate mainstream and heritage cultures. It is predicted that:

H₃ Bicultural Indian students will demonstrate positive psychological and socio-cultural adjustment.

- Integration relies on having a set of skills that allows the student to interpret and respond appropriately to interact and form relationships within the host culture. It is predicted that:

H₄ Indian students' self-construal and psychological and sociological adjustment will be mediated by social connectedness and English language.

CHAPTER 2 - METHOD

2.1 Participants

Participants for this study were drawn from Indian undergraduate and post-graduate students studying to Masters level at Waiariki Institute of Technology during the 2014 academic year. For its size, Waiariki has a significant international student population with just over 800 international student enrolments during 2014, 522 of whom were Indian students at the time the study was undertaken. Attempts to involve a second Technical Institute, to increase access to a broader student base, failed due to a lack of response from the organisation's Ethics Committee, in spite of repeated attempts over a one month period to follow up the application.

The focus was on attracting a homogeneous group of students in terms of length of residence in the country. Only students studying on a student visa at Waiariki were included in the study, which would narrow the length of stay to those who were recent arrivals up to and including students completing a three year qualification. A feature of many international studies appears to be the heterogeneity of samples including diverse ethnicities, lengths of stay that extend over many years, and those that include second generation migrants. Choi and Thomas (2009) comment that a migrant's acculturation attitude is often determined by the length of residence in the host country. The heterogeneity seen in many study samples is understood to contribute to the inconsistency of findings (Cross et al., 2011) that plague this area of study.

In spite of extensive efforts to recruit participants (summarised below) from among the 522 who were eligible, a total of 40 students responded to the demographic section, while 39 proceeded to complete the remainder of the survey which represents only 7.4% of the total number of Indian students enrolled at Waiariki during the period of the survey. This is a perplexing response to what would appear a non-threatening, anonymous and simple approach for students to have their voice heard. However, it seems that this poor response is not an isolated event in research involving

Indian participants. Raman and Harwood (2008) expressed difficulties recruiting Indian students at a large American university and were forced to recruit from other teaching institutions to gather an adequate sample. Farver et al. (2002) in a study of Indian migrant families in the United States could only muster a small sample and commented on the difficulties gathering information from participants. Staff members of the International Centre at Waiariki have observed that Indian students, in comparison with other ethnic groups on-campus, have consistently been the poorest responders to surveys run through this department.

2.2 Procedure

Data collection centred on an anonymous 20 minute online survey consisting of five separate scales, all written in English, with a combined total of 87 items. Each scale has been used repeatedly in assessing international student populations. In addition, students were asked to supply their most recent score from one of several available Standard English Tests and provide a range of demographic information. The survey was conducted using the Qualitrics Information Systems administered by Massey University.

To administer the online survey, a list of eligible Indian students was obtained from Waiariki Institute of Technology's International Centre. An introductory email was sent to each student by the Centre approximately one week before the study commenced alerting students to the study, introducing myself as the researcher and offering a brief explanation about the study purpose. This was subsequently followed by a link to the study emailed to each eligible student inviting participation and enabling access to detailed information about the survey (Appendix A) and the various scales (Appendix B). Those who had not completed the survey were emailed reminders fortnightly over a two month period, resulting in the link to the survey being sent to each eligible student four times. When this approach failed to generate sufficient respondents, posters and flyers were distributed around the Waiariki Campus advertising additional access points to the survey. Links to the survey

were added to three Waiariki associated Facebook pages regularly visited by Indian students. One of these Facebook accounts is a dedicated site for Indian students at Waiariki. Lecturing staff who conducted classes with high numbers of Indian students were advised about the survey and informed students about the available access options. Data collection remained open for a further month through Facebook with active on-campus advertising of the survey. As a variety of strategies were used to recruit participants over a three month period, it was decided to conclude the survey and proceed with the available 39 responses.

Approval to undertake this study was obtained from the Massey University Human Ethics Committee: Southern B and the Waiariki Institute of Technology Research Committee. Information pertaining to informed consent and withdrawal from sections or all of the survey was outlined in the information page for students that introduced the survey. This section also detailed various avenues for support in the event of the survey generating feelings of distress.

2.3 Measures

2.3.1 Sixfold Self-Construal Scale

Measurement of self-construal over almost three decades has produced an often confusing and inconsistent body of literature (Cross et al., 2011). The most widely used scales have been those developed by Singelis (1994) and Gudykunst et al. (1996) which do not incorporate recent advances in understanding that discriminate between the relational and collective aspects of interdependent self-construal and as a result fail to adequately explicate this construct. Contextualisation is a well-recognised feature of interdependent self-construal and these earlier measures lacked the contextual sensitivity to probe this construct and thereby have been unable to isolate predicted differences in self-construal (Oyserman, Coon, & Kemmelmeier, 2002). A meta-analysis of the most commonly used measures concluded that self-construal scales produced results that were “highly unstable within and across cultures” and failed to measure the constructs they were investigating

(Levine et al., 2003, p. 210). Following a course of action that could potentially add to an existing body of confusing literature appears unproductive. As a result, the Sixfold Self-Construal Scale (Harb & Smith, 2008) (Appendix B: Part A, p. 90) was selected as it offers an updated and innovative approach to measure self-construal. This scale is consistent with Marcus and Kitayama's conceptualisation of self-construal but is described as a 'flexible instrument' that recognises the differentiation of interdependent self-construal by examining the relational-collective and horizontal-vertical distinctions. This scale was constructed in response to validity concerns associated with measuring self-construal (Cross et al., 2011) and to provide a clearer understanding of the constructs by drawing a link with self-categorisation theory (Harb & Smith, 2008).

The scale is a 5 x 6 construction that results in a total of 30 items. Five questions examine the connectedness of individuals with six categories of relationships ranging from: self, family, significant others, societal groups and humanity in general. Each question asks participants about their level of affiliation with each category by reporting from 1 (to a very small extent) to 7 (a very large extent) on a seven-point Likert scale. These relational categories explore different configurations of self-construal with four sub-scales describing the different dimensions of interdependence identified as: vertical-relational which addresses family connections, horizontal-relational measures friendships, associations with fellow students relate to horizontal-collective and social groups for vertical-collective. The category identified as 'Myself' measures an individual's level of independent self-construal. A final category is seen as universal and considers the individual's connection with humanity in general. Harb and Smith (2008) describe this dimension as representing the "supra-structure of 'humanity' " which defines membership of the human race and extends beyond the determinants and dynamics of social interaction (p. 183).

Participants' responses to each relational category produce the scores for the six separate sub-scales of the Sixfold Self-Construal Scale: the vertical-relational, horizontal-relational, vertical-collective, horizontal-collective, humanity and independent sub-scales. Scores from each sub-scale are totalled

to produce a result that defines a specific dimension of self-construal type (e.g. vertical-relational interdependent self-construal). The data from the four interdependent sub-scales (vertical-relational, horizontal-relational, vertical-collective, horizontal-collective) and that from the independent sub-scale were then used to explore the hypothesis identified in this study. The humanity scale was not included in examining the hypotheses as it is not considered a self-construal dimension directly associated with interpersonal relationships and the adjustment process.

The scale has been used across a number of differing ethnic cultures with consistent reports of good reliability. The six sub-scales report a Cronbach alpha of between 0.68 to 0.92 with five of these sub-scales reported to be above 0.79 (Harb & Smith, 2008). With only four published reports of its use to date, the Sixfold Self Construal Scale remains relatively untested. However, as the scale does not appear to have attracted any negative comments it was considered a relevant measure to study Indian students who have been variously described as horizontal and vertical collectivists (Verma & Triandis, 1999) and as possessing an interdependent self-construal (Verma, 1999). A scale that is more sensitive towards interdependent self-construal may also tap into and provide some insight into the Indian 'paradoxical self' (Sinha, 1982) as this is the first time, from evidence of published material, the scale has been used with a group of Indian students.

2.3.2 Revised Sociocultural Adaptation Scale

Socio-cultural adjustment was measured using the Revised Sociocultural Adaptation Scale (SCAS-R) (Wilson, 2013), a recently updated version of the original Sociocultural Adaptation Scale developed by Ward and Kennedy (1994) (Appendix B: Part B, p. 93). This scale was recommended as it was considered to be an advance on earlier editions (C. Ward, personal communication, 5.2.2014). The original scale and subsequent versions are considered popular measures of socio-cultural adjustment (Zhang & Goodson, 2011b) and reported as reliable measures of international student adjustment. The revised version of the scale has a reported Cronbach Alpha of 0.92.

Previous versions of the scale have been described as an appropriate measure to assess adjustment of international students (O'Reilly, Ryan, & Hickey, 2010) being a flexible tool that can be adjusted according to the culture and group being studied (Ward & Kennedy, 1999). The scale and its derivatives have been used among various populations that include international students studying in New Zealand (Ward & Kennedy, 1993b), multi-cultural student groups (Ward & Searle, 1991) and migrants of varying age groups and ethnicities (Ward & Kus, 2012).

The scale incorporates 21 questions examining various aspects of adjustment, using a five-point Likert scale asking students to consider from 1 (not at all competent) to 5 (very competent) how well they perceive they are managing in each area. Individual responses to each question are totalled to provide an overall score of socio-cultural adjustment for each participant. A total of 20 questions were included in this survey as one question involving community services was omitted. Based on the performance of earlier versions of this scale and the fact that it is designed for use within the New Zealand context, it was considered appropriate to follow advice and use the updated, but as yet unpublished version.

2.3.3 Shortened Affectometer 2 Scale

Psychological adjustment is an assessment of mood (Ward & Kennedy, 1994) and a variety of traditional depression scales have been commonly employed to measure this construct amongst international students. However, the issue concerned with settlement and life satisfaction can be alternatively viewed from a happiness or contentment perspective. Rather than choosing a depression scale, a shortened version of the standard 40 item Affectometer 2 Scale that contains both positive and negative mood states (Kammann & Flett, 1983) was used to measure levels of satisfaction and contentment with current circumstances. (Appendix B: Part C, p. 95).

Ten items (five positive and five negative) considered most relevant to assess the wellbeing of international students were used to measure psychological adjustment. The scale asks students to

rate how they felt during the previous week about each item area using five alternatives ranging from 1 (not at all) to 5 (all the time). The five negative items included in this scale were reverse scored then added to the remaining five items to produce an overall individual score of psychological wellbeing. The higher the score recorded using the scale, the greater the level of wellbeing.

The Affectometer 2 Scale is considered a valid and a reliable measure of mood with a Cronbach alpha score ranging from 0.88 to 0.93 (Kammann & Flett, 1983) reported. The scale has been used widely in different populations to assess psychological wellbeing and mental health including among the general population (Tennant, Joseph, & Stewart-Brown, 2007), transitional communities in South Africa (Roos, Potgieter, & Temane, 2013) and public service employees. A shortened form of this scale was selected as it is said to retain the properties of the full scale (Tennant et al., 2007).

2.3.4 Social Connectedness Scale-R

The Social Connectedness Scale-R (Lee et al., 2001), a 20 item scale that contains 10 positively and 10 negatively worded questions, was used to assess students' connectedness. (Appendix B: Part D, p. 96). Students were required to rate their responses to situations probing their level of connectedness on a six point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Participants' responses to the 20 items are totalled to produce each individual's score of social connectedness. Higher scores indicate a higher level of social connectedness. This scale has been used on a number of occasions by Lee and colleagues among various migrant and international student populations and has been shown to be a reliable measure of social connectedness with a Cronbach alpha of 0.94.

2.3.5 English Language Confidence Scale

Competence with the English language is identified as one of the key predictors of international student adjustment (Uskul et al., 2004; Yeh & Inose, 2003). English language confidence was

assessed using the six item English Language Confidence Scale (Clément & Baker, 2001). The scale asks students to rate their confidence to read, write, speak, understand and use English in social settings on a scale of 1 (strongly disagree) to 6 (strongly agree). An individual's response to each of the six items is totalled to produce a score of their overall English language confidence. A high score indicates a high level of confidence using English.

The authors report the scale has been shown to be a reliable measure of confidence in the use of English with Cronbach alpha scores ranging from 0.74 to 0.93. (Appendix B: Part E, p. 98).

2.3.6 Standard English Score

Students were given a choice of the available tests offered by international agencies that measure English language ability across four domains: reading, writing, speaking, listening and comprehension. Students were asked to record their most recent score on any of the identified tests. (Appendix B: Part F, p. 99). The score serves as a guide to English language fluency and a progressively higher set level across all domains or bands is required to gain entry to undergraduate and post-graduate tertiary education in New Zealand.

The most commonly used test of English language skills taken by students at Waiariki is the International English Language Test System (IELTS). The IELTS contains a nine band scoring system with bands 0 – 3 suggesting non-existent, intermittent and limited language skills, bands 4 - 6 describing increasing skills leading towards becoming a competent user, while the highest level of proficiency is band 9, an expert user of the English language (IELTS, 2015). (Appendix B: Part G, p. 100).

Students reported the Standard English score they were issued after completing a recent test, which is often undertaken in India prior to applying to undertake further study in New Zealand. They were asked to report their scores in each band and individual students' scores in each band were totalled

to produce an overall sample mean of English competency. As all students reported undertaking an IELTS test the sample mean reflects an IELTS mean score.

2.3.7 Demographics

Demographic details sought included age, gender, marital status and spouse location (either with the student in New Zealand or at home in India), details about accommodation and length of stay in New Zealand. Further questions explored employment, the highest qualification attained prior to study at Waiariki and where this was achieved, current broad area of study at Waiariki and a student's home state in India.

CHAPTER 3 – RESULTS

Analysis of data gathered through the online survey was undertaken using the Statistical Package for the Social Sciences (SPSS) computer software. While 41 students initiated the survey and consented to participate, 40 students completed the demographic section only and 39 went on to complete either all or most of the scales. This has resulted in a varying number of participants for each scale or sub-scale.

3.1 Descriptive Statistics

Of the 40 students who provided demographic data the majority of respondents were males (63%) compared with the lower number of females students (38%) who participated in the survey. The majority of those who commenced the survey were aged 20 – 30 years (93%) with the most common age bracket being 20-25 years (60%). Most of the students were single (73%) but of those who were married, all but one student were living in New Zealand with their spouse. More than half of the students were recent arrivals, having been in the country less than six months (53%) with most (90%) commencing their study in New Zealand within the past 12 months. A higher number of students (59%) were from the northern areas of India in comparison with those arriving from central (23%) and southern states (18%).

Among this group of participants, enrolment in health (43%) and business and computing (25%) courses were the more popular options. At Waiariki Institute of Technology these courses are all New Zealand Qualifications Authority (NZQA) Level 7 and Level 8 Diploma, Degree and Post-graduate programmes requiring higher levels of English language ability. International students studying NZQA Level 7 qualifications at Waiariki Institute of Technology must possess an overall IELTS score of 6.0 with no band less than 5.5, while post-graduate students require 6.5 overall with no band scores lower than 6.0.

Having greater language competence could influence the employability of Indian students as many were in employment (53%) with all but four students indicating they had part time jobs. Almost half of the employed students were working in an area related to their field of study which may reflect the higher number of participants doing health courses who seek work in the aged-care and community support sectors of the health care industry.

The sample was a particularly well-educated group with 75% of participants arriving from India with a Bachelor's Degree or higher qualification. Again this may be influenced by enrolment in health courses that require previous professional qualifications and higher test scores of English competence. A further 13% of participants indicated they commenced study in New Zealand with diploma level qualifications.

3.2 Measures

Table 1 summarises the descriptive statistics for measures used in this study. The alpha reliabilities shown for each of the measures are above the accepted 0.70 level ranging from 0.74 to 0.92. Consistent with the small sample of students who responded to the survey, the normal distribution of data in a number of the scales is skewed, particularly the English Language Confidence scale, in which students reported higher levels of confidence with a mean score of 5.55. The remaining scales were found to be within acceptable limits for further analysis.

Table 1

Range, Mean and Standard Deviation of Research Variables, 95% Confidence of the Means and Alpha Reliabilities of the Measures

Variables	Scales and sub-scales	Score Range		M	95% CI	SD	α
		Min	Max				
Self-Construal	SFSC Sub-Scales						
	VR (n=39)	1	7	5.88	(5.53, 6.23)	1.10	0.76
	HR (n=39)	1	7	5.05	(4.64, 5.46)	1.32	0.88
	HC (n=39)	1	7	4.39	(4.04, 4.74)	1.13	0.82
	VC (n=38)	1	7	4.27	(3.90, 4.64)	1.17	0.79
	Humanity (n=39)	1	7	4.67	(4.31, 5.03)	1.16	0.75
	Independent (n=39)	1	7	5.29	(4.87, 5.71)	1.34	0.74
Socio-cultural Adjustment	SCAS-R (n=39)	1	5	3.51	(3.29, 3.73)	0.70	0.94
Psychological Adjustment	Affectometer 2 Scale (n=39)	1	5	3.63	(3.41, 3.85)	0.70	0.80
Social Connectedness	SCS-R (n=36)	1	6	4.11	(3.94, 4.28)	0.53	0.77
English Language Confidence	ELCS (n=37)	3	6	5.55	(5.34, 5.76)	0.64	0.92
English Language Ability	IELTs Band Scores (n=35) (Self-Reported)	5.0	9.0	6.54	(6.36, 6.72)	0.55	-
	Reading	5.0	9.0	5.55	(5.34, 5.76)	0.64	-
	Writing	5.5	7.5	6.17	(5.99, 6.35)	0.53	-
	Listening	5.0	9.0	6.94	(6.69, 7.23)	0.81	-
	Speaking	5.0	7.5	6.40	(6.91, 6.61)	0.63	-

SFSC: Six-Fold Self-Construal Scale, SCAS-R : Revised Sociocultural Adaptation Scale, SCS-R :Social Connectedness Scale-R, ELCS: English Language Confidence Scale, VR: Vertical- Relational Self-Construal, HR: Horizontal-Collective, VC: Vertical-Collective, HC: Horizontal-Collective

The Sixfold Self-Construal Scale (SFSC) sub-scales demonstrate that the vertical-relational (VR) dimension of interdependent self-construal was most dominant indicating that students in this study identify more with maintaining close ties within a traditional Indian family structure. However,

independent self-construal was also rated highly indicating that Indian students at Waiariki have a strong blend of both forms of self-construal and show a tendency towards developing a bicultural identity. English language fluency supports students' acquisition of a bicultural identity which can be seen with the higher mean scores in the English Language Confidence Scale and the International English Language Test Score (IELT) across all four bands (reading, writing, speaking and listening). A mean score of just over 6.5 is an indication of someone who is a competent user with a good range of language skills. While this may be the case for those students studying higher level courses, the range of scores within each band (up to 4.0 points in two bands) suggests that English language fluency appears to be a challenge for some Indian students.

The higher mean scores for socio-cultural ($M = 3.63$) and psychological adjustment ($M = 3.63$), both with modest standard deviations, demonstrate higher levels of adjustment. Similar high mean scores in social connectedness ($M = 4.11$) and English language confidence ($M = 5.55$) suggest that Indian students generally fare well in both these areas.

3.3 Normative Comparisons

Normative data largely centred around three of the five scales used in this study. It is not possible to identify comparisons with the Revised Sociocultural Adaptation Scale as to date there have been no published results using this scale and the Affectometer R Scale has been adapted for use in this study. As Harb and Smith's (2008) SFSC is a recent addition to the measures available to assess self-construal there is limited normative data that is suitable for comparison with the current student group. Only four published studies include the use of the SFSC Scale but data relating to the self-construal of students is only able to be drawn from two of these studies for comparison with Indian students. Table 2 summarises data from seven comparison groups.

Table 2

Normative Comparisons of the Sixfold Self-Construal Scale

Sample	VR	HR	HC	VC	Relational	Collective	Humanity	Ind
Harb & Smith (2008)								
United Kingdom (n=170)	5.90 (SD 1.02)	5.78 (SD 0.87)	3.01 (SD 1.23)	3.22 (SD 1.40)	-	-	3.83 (SD 1.16)	5.87 (SD 0.89)
Lebanon (n=227)	5.93 (SD 0.98)	5.20 (SD 0.98)	2.93 (SD 1.20)	3.57 (SD 1.41)	-	-	3.90 (SD 1.34)	5.79 (SD 1.04)
Syria (n=232)	6.19 (SD 1.04)	4.95 (SD 1.18)	3.66 (SD 1.21)	4.41 (SD 1.31)	-	-	4.65 (SD 1.32)	5.15 (SD 1.34)
Jordan (n=226)	6.14 (SD 0.93)	5.13 (SD 1.10)	3.32 (SD 1.18)	3.56 (SD 1.62)	-	-	4.34 (SD 1.33)	5.50 (SD 1.16)
Schachner et al. (2013)								
Poland (n=193)		-	-	-	6.08 (SD 0.82)	3.76 (SD 1.11)	3.83 (SD 1.34)	6.07 (SD 0.86)
East Germany (n=159)		-	-	-	6.26 (SD 0.78)	3.83 (SD 1.03)	4.02 (SD 1.13)	6.17 (SD 0.86)
West Germany (n=138)		-	-	-	6.32 (SD 0.62)	3.78 (SD 1.09)	4.28 (SD 1.22)	6.21 (SD 0.87)
Current Study								
Indian Students (n=39)	5.88 (SD 1.10)	5.05 (SD 1.32)	4.39 (SD 1.13)	4.27 (SD 1.17)	5.64 (SD 1.09) (Merged Data)	4.72 (SD 1.56) (Merged Data)	4.67 (SD 1.16)	5.29 (SD 1.34)

VR: Vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective, Ind: Independent

In the study by Harb and Smith (2008) the United Kingdom represents an individualistic culture while the remaining three are traditional collectivist societies. In spite of the small number of participants in the current study, there is some consistency between the mean scores of most dimensions of the three more traditional societies studied by Harb and Smith. Among these three nations Lebanon is reported to have greater ethnic diversity and having been exposed to more western influences, possibly acts as a stronger comparison group with Indian students. Lebanese and Indian students are similar in both relational dimensions with only a small difference in the effect sizes for vertical-

relational $d = 0.05$ and horizontal-relational self-construal $d = 0.13$. However, the large discrepancy in the two collective dimensions of self-construal between Lebanese and Indian students may reflect factors associated with the size of the current sample rather than a real difference among Indian students. Increased collective self-construal would indicate closer identification with social groups and as Indian students appear stronger in these two areas than all groups in this comparative analysis, further research in this area is required to determine the significance of this result. There is some consistency among the five student groups with all showing higher levels of independent self-construal, second only to vertical-relational interdependence in all cases. However, Lebanese students are more independent than Indian students with a moderate difference, $d = 0.40$, in the effect size.

Schachner, Robertson, Vijver, Funke, and Brzezinska (2013), looking at inclusiveness across three European populations, used a modified version of the SFSC scale. The authors report a number of items were removed across all sub-scales and both relational and collective dimensions were merged to reflect the key focus of their study. A similar merging of data was undertaken for comparison and results reveal that European students show a higher level of independent self-construal while Indian students show a higher level of collective self-construal than that reported by European students, as discussed above. The higher relational scores found among European students could indicate their established closer friendship networks captured by the horizontal-relational dimension. While lower scores in the current study may be consistent with a group who are relatively recent arrivals to New Zealand having limited opportunity to develop the same depth of friendship networks and rating this dimension as being less influential.

Comparisons with both the above reported studies must be treated with caution as data in both groups is gathered from domestic university students who are within a familiar cultural setting which may impact on overall scores across each dimension of self-construal. While there are similarities in the ages of participants in all three studies, both Harb and Smith and Schachner et al. report more

than twice the number of female participants which is a noticeable departure from the current study that attracted more male respondents.

A study by Ji (2012) used the SFSC Scale to investigate the relationship between self-construal and the conflict management styles of Chinese students. A description of the participants' self-construal is not provided but the scale is reported to predict identified conflict management styles. A fourth study by Reddish, Bulbulia, and Fischer (2014) investigating prosocial behaviour used the SFSC Scale to assess self-construal as a mediating variable. However, the report does not include any findings related to this area of inquiry.

Comparisons between groups for the humanity dimension of the SFSC scale show that Indian students score higher in this dimension than all other ethnic groups, although only marginally when compared with Syria. Higher scores in this area may reflect a society that cultivates an attitude of unity among all people and in the case of India it may represent an extension of religious thought and be influenced by Hindu spirituality. Universalist educational systems can be responsible for encouraging populations to embrace global perspectives and thereby have a greater sense of global connectedness (C. Harb, personal communication, 30.12.2014).

Two studies have been used to compare social connectedness indicating that Indian students appear less connected than international students studying in North America (Table 3). Lee et al. (2001) sampled a group of American domestic students, of whom 22 are described as Asian Americans, at various stages of their tertiary education. The participants were all described as living in the halls of residence of a large university. In spite of the current study focussing on international students, only a modest effect size $d = .57$ is seen in the mean scores between these two samples.

Table 3

Normative Comparisons for the Social-Connectedness Scale-Revised and the English Second Language Confidence Scale

Sample	<i>M</i>	<i>SD</i>
SCSR		
United States Domestic Students (n=100) (Lee, Draper & Lee, 2001)	4.49	0.77
Asian International Students in US (n=227 Asian students) (Yeh & Inose, 2003) (SCS 1995)	4.60	1.05
Current Study Indian Students (n=39)	4.11	0.53
ESLC		
Canadian International Students (n=81) (Yang, Noels & Samure, 2006)	4.60	1.08
Indian Students (n=39) Current Study	5.55	0.64

Yeh and Inose (2003) using an earlier version of the Social Connectedness Scale (Lee & Robbins, 1995) sampled 359 international students studying in the United States. The results from the Asian group of students in this study (n = 227) show they appear to have a higher level of social connectedness than Indian students. However, this may relate to the considerably longer average length of residence of 3.34 years in the United States reported in this group, providing greater opportunity to establish a range of social networks. Variations between the two versions of this scale could account for some of the difference.

3.4 The Self-Construal of Indian students

The first hypothesis of this study undertook to assess whether Indian students had a stronger interdependent than independent self-construal. The strength of the SFSC scale is its ability to permit a clearer understanding of the diverse nature of interdependent self-construal by providing the opportunity to examine an individual's responses to each one of the four interdependent sub-

scales which describe the unique dimensions of interdependent self-construal: vertical-relational, horizontal-relational, vertical-collective and horizontal-collective. It allows the researcher to investigate the relationship between each one of the four interdependent dimensions of self-construal and independent self-construal, assessed by an individual's response to the 'Myself' sub-scale. These relationships are explored to determine the nature of the self-construal of Indian international students who choose New Zealand as a study destination. In addition, the influence of gender, length of stay and state of origin in India on each dimension of self-construal is assessed to identify any areas of significance.

Finally, in order to highlight the utility of the SFSC in probing more explicitly the composition of interdependent self-construal, two further analyses were undertaken. The first involved taking the data from the vertical-relational and horizontal-relational sub-scales and combining them to produce a relational interdependent self-construal score. Similarly, the data from the vertical-collective and horizontal-collective sub-scales were combined to create a collective interdependent self-construal score. This modification to the SFSC scale was used by Schachner et al. (2013) in their investigation of the self-construal of students from various European ethnicities. This was done to determine if combining scores, as described, would impact on the relationship between interdependent and independent self-construal.

The second analysis was undertaken to illustrate the sensitivity of the SFSC scale in recognising the unique characteristics of all four interdependent self-construal dimensions and the contribution they make towards understanding interdependent self-construal. The scores from all four interdependent sub-scales of the SFSC scale: vertical-relational, horizontal-relational, vertical-collective and horizontal-collective, were combined to provide a single interdependent self-construal score. Cross et al. (2011) suggest that the confusion found in self-construal studies can often be attributed to scales that fail to expose the characteristics of interdependent self-construal and base finding on a one dimensional view of this self-construal. The single interdependent self-construal score, compiled

in this study as described, was used to determine whether aggregating the scores of the four interdependent sub-scale of the SFSC scale would illustrate a lack of clarity in understanding this self-view and provide a distorted impression of the interdependent self-construal of Indian students.

3.4.1 Four Dimensions of Interdependent Self-Construal versus Independent Self-Construal

A series of paired *t*-tests was undertaken to assess differences between each of the four dimensions of interdependent self-construal and independent self-construal. Table 4 shows that in only the vertical-relational dimension Indian students had a significantly higher interdependent ($M = 5.88, SD 1.10$) than independent self-construal ($M = 5.30, SD 1.34; t(38) = 4.21, p < 0.05$, with Cohen's $d = 0.48$ indicating a moderate effect size in the difference between the mean scores.

Table 4

Comparison of Mean Differences between the Four Dimensions of Interdependent Dimensions and Independent Self-Construal

Self-Construal	Interdependent S/C		Independent S/C		<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Vertical-Relational	5.89	1.10	5.30	1.34	38	4.214	.000*	0.48
Horizontal-Relational	5.05	1.33	5.30	1.34	38	-1.256	0.22	-0.19
Vertical-Collective	4.27	1.17	5.36	1.29	37	-5.250	.000*	-0.88
Horizontal Collective	4.39	1.13	5.30	1.34	38	-5.098	.000*	-0.73

$p < 0.01^*$

S/C: Self-construal.

Comparisons with the remaining two areas of significance reveal that students exhibited less interdependent horizontal-collective ($M = 4.39, SD 1.34$), $t(38) = -5.10, p < 0.05$ and vertical-collective ($M = 4.27, SD 1.17$), $t(37) = -5.25, p < 0.05$ than independent self-construal. Effect sizes for both these comparisons are moderate to large $d = -0.67$ and large $d = -0.88$, with 95% confidence intervals ranging from -1.26 to -0.54 and -1.00 to -0.22 respectively.

The discriminatory power of the SFSC scale demonstrates there is variable evidence to support the first hypothesis as Indian students do not clearly exhibit more interdependent than independent self-construal. In fact Indian students only appeared to be more interdependent in the vertical-relational area, which is consistent with a traditional cultural background. The findings indicate a balance of both independent and interdependent self-construal which suggests the potential for a bicultural identity.

Further analysis was undertaken to explore the relationship between selected demographic variables and the self-construal of Indian students. Literature demonstrates the existence of gender and regional differences in levels of interdependent and independent self-construal among Indian students studying in India. In addition, the integration strategy of acculturation and bicultural identity formation is adopted by most migrants suggesting that time in the host country influences self-construal. An analysis of these variables was undertaken to explore the relationship between each variable and Indian students' self-construal.

Table 5

Comparison of Mean Differences between Gender and Self-Construal of Indian Students

Self-Construal	Male (n=25)		Female (n=15)		df	t	p	d
	M	SD	M	SD				
Vertical-Relational	5.54	1.20	6.43	0.60	37	-3.074	.004**	-0.94
Horizontal-Relational	4.92	1.35	5.25	1.31	37	-0.735	0.467	-0.25
Vertical-Collective	4.23	0.97	4.34	1.46	37	-0.264	0.793	-0.09
Horizontal Collective	4.20	1.01	4.70	1.28	36	-1.354	0.184	-0.43
Humanity	4.65	0.89	4.72	1.53	37	-0.158	0.860	-0.05
Independent	4.91	1.43	5.91	0.94	37	-2.411	0.020*	-0.83

$p < 0.05^*$

$p < 0.01^{**}$

Paired t-tests exploring the association between gender and self-construal (Table 5) show significant mean differences between male and female Indian students with large effect sizes found in each case; $d = 0.94$ in vertical-relational self-construal and $d = 0.83$ with independent self-construal. Results show more evidence of a bicultural identity formation among female than male students.

A one-way analysis of variance (ANOVA) was undertaken to investigate any association between length of stay in New Zealand and a student's home state on self-construal. The various states reported were broadly categorised into the three geographical areas of northern, central and southern India. Tables 6 summarises the results of the analysis of length of stay and shows this variable has no bearing on the self-construal of Indian students in this study. An eta-squared analysis of effect sizes shows that a student's length of stay has little impact on explaining the variance in all but independent self-construal where a moderate effect size $\eta^2 = .06$ is seen.

Table 6

One-way Analysis of Variance for the Effects of Self-Construal on Length of Stay in New Zealand

Variable and Source	<i>M</i>	<i>SD</i>	<i>F</i> (2, 36)	<i>F</i> (2, 35)	<i>p</i>	η^2
Vertical-relational self-construal	5.88	1.10	.422	-	.659	.02
Horizontal-relational self-construal	5.05	1.32	.325	-	.706	.02
Vertical-collective self-construal	4.27	1.17	-	.088	.916	.00
Horizontal-collective self-construal	4.39	1.13	.044	-	.957	.00
Humanity	4.67	1.16	.056	-	.946	.00
Independent self-construal	5.29	1.34	1.049	-	.361	.06

A similar result is found in the association between self-construal and a student's home state in India as shown in Table 7. An analysis of effect sizes indicates that a student's home state accounted for a large amount of the variation in the horizontal-collective $\eta^2 = .12$, humanity $\eta^2 = .13$, and independent $\eta^2 = .10$ dimensions. Some caution is required when considering these results as the small sample size may be responsible for the lack of significance and the effect sizes seen in both variables subjected to ANOVA. A larger sample would clarify the position by producing a more

accurate understanding of the significance and effect of these two variables on Indian students' self-construal.

Table 7

One-way Analysis of Variance for the Effects of Self-Construal on Students' Home State of Origin

Variable and Source	<i>M</i>	<i>SD</i>	<i>F</i> (2, 35)	<i>F</i> (2, 34)	<i>p</i>	η^2
Vertical-relational self-construal	5.88	1.10	1.188	-	.317	.06
Horizontal-relational self-construal	5.05	1.32	.572	-	.569	.03
Vertical-collective self-construal	4.27	1.17	-	.231	.795	.01
Horizontal-collective self-construal	4.39	1.13	2.345	-	.111	.12
Humanity	4.67	1.16	2.535	-	.094	.13
Independent self-construal	5.29	1.34	1.876	-	.168	.10

3.4.2 Merged Interdependent and Independent Self-Construal

Table 8 shows the data from the four interdependent SFSC sub-scales that were firstly combined to show the relationship between the relational and collective dimensions and independent self-construal. This comparison highlights the value of the SFSC scale in gaining a clearer understanding of the self-construal of Indian students. The higher combined mean score for relational compared with the collective self-construal indicates Indian students' self-view is influenced more by close ties with the extended family group and those with whom they have emotional connections. However, the most striking feature of the combining of data is the appearance of the lack of precision and weakening strength in interdependent self-construal emerging in a comparison with independent self-construal. A paired *t*-test indicates that while the analysis points to a slightly higher mean for the relational dimension (*M* = 5.46, *SD* 1.10) than for independent self-construal (*M* = 5.29, *SD* 1.34); $t(38) = 1.178$, the difference is not significant.

Table 8

Merged Interdependent Self-Construal Scores Comparing all Interdependent Dimensions and the Relational and Collective Dimensions with Independent Self-Construal

Self-Construal	Interdependent Dimensions		Independent Self-Construal		df	t	p	d
	Mean	SD	Mean	SD				
Interdependent (VR,HR,VC & HC dimensions)	4.92	0.99	5.29	1.34	38	-3.018	0.00*	-0.31
Relational (VR & HR dimensions)	5.46	1.10	5.29	1.34	38	1.178	0.25	0.14
Collective (VC & HC dimensions)	4.72	1.16	5.29	1.34	38	-3.306	0.00*	-0.45

$p < 0.01^*$

When all four interdependent self-construal dimensions of the SFSC scale are aggregated to produce a single interdependent self-construal score, stronger support for rejecting the first hypothesis emerges, as this results in Indian students demonstrating a preference for independent over interdependent self-construal.

These findings highlight the complexity of interdependent self-construal and the unique contribution that each one of the four interdependent dimensions of self-construal makes by using the SFSC scale. This distinction is lost with various aggregations of data producing a confusing impression of self-construal and migrant identity. This loss of definition may be responsible for the inconsistency often referred to in the literature in studies of self-construal that have relied on more traditional bi-dimensional scales.

3.5 Socio-cultural and Psychological Adjustment

The second hypothesis in this study sought to assess whether the dimensions of interdependent and independent self-construal predicted socio-cultural and psychological adjustment of Indian students. An initial test of the usual assumptions was undertaken prior to a regression analysis to investigate the relationship between the variables. The small sample size was a challenge for a number of these

assumptions but linearity and normalcy of data were all found to be within acceptable limits. While there was evidence of skewness and kurtosis within some of the SFSC sub-scales they did not violate the accepted normal limits with the distribution remaining within twice the standard error for each test statistic (Coolican, 2009). Table 9 demonstrates some subscales show a higher level of correlation between variables but the tests of multi-collinearity show the results fall within accepted limits for both the Tolerance and Variance Inflation Factor measures. Homoscedasticity is generally evident in each sub-scale and the one outlier identified in the socio-cultural data set was included for analysis as it did not unduly affect the overall result as shown by the Cook's Distance test. The Malalanobis test of distance ranged from 1.0 to 14.7 for socio-cultural adjustment and from 1.1 to 16.1 for psychological adjustment which demonstrated that no cases in either condition exceeded the critical value of 20.52 for the five independent variables (Tabachnick & Fidel, 2013). In spite of the small sample size there was sufficient evidence that assumptions were met to proceed with a regression analysis.

Table 9

Correlations between Socio-cultural Adjustment and Psychological Adjustment and Vertical-Relational, Horizontal Relational, Vertical-Collective and Horizontal-Collective Self-Construal

Variables	Socio-cultural Adjustment	Psychological Adjustment Self-Construal	Vertical-Relational Self-Construal	Horizontal Relational Self-Construal	Vertical-Collective Self-Construal	Horizontal-Collective Self-Construal
VR Self-Construal	.46*	.25				
HR Self-Construal	.33*	.38**	.62**			
VC Self-Construal	.32*	.61**	.33*	.62**		
HC Self-Construal	.25*	.51**	.47**	.79**	.76**	
Ind Self-Construal	.43*	.36*	.75**	.57**	.47**	.64**

** Correlation is significant at p < 0.01 (1-tailed)

* Correlation is significant at p < 0.05 (1-tailed)

VR: Vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective

Results of standard linear regression provide partial support for the second hypothesis showing that self-construal predicts psychological adjustment but not socio-cultural adjustment. Two separate analyses were undertaken for each adjustment variable. The first regression model for each variable considered self-construal only as the predicting variable. The second analysis explored the addition and predictive effect of gender with self-construal on the regression model. Gender was added to the model as female Indian students have a significantly higher mean score in both the vertical-horizontal ($M = 6.43$) and independent ($M = 5.91$) dimensions of self-construal than male students ($M = 5.54$) and ($M = 4.91$) respectively. Table 10 demonstrates that self-construal does not predict socio-cultural adjustment $F(5, 32) = 2.209, p = 0.78$ as the model only explains 14% of the variance (Adjusted R^2) on the dependent variable. Of the five dimensions vertical-relational self-construal $\beta = .30$ made the greatest unique contribution towards the variance. The addition of gender made no difference to the predictive capacity of the model.

Table 10

Predicting Socio-cultural Adjustment from the Interdependent and Independent Dimensions of the Sixfold Self Construal Scale

Variable	Without Gender				With Gender			
	B	SE B	β	p	B	SE B	β	p
Gender					.099	.251	-.070	.696
VR self-construal	.193	.168	.302	.260	.215	.179	.336	.240
HR self-construal	.013	.149	.025	.929	-.005	.158	-.009	.977
VC self-construal	.156	.140	.262	.273	.147	.143	.247	.314
HC self-construal	-.117	.197	-.192	.559	-.095	.207	-.157	.650
Independent self-construal	.102	.146	.191	.487	.104	.148	.193	.488
R^2	.257				.260			
Adjusted R^2	.140				.117			
p value	.078				.128			

VR: Vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective

In contrast, Table 11 shows self-construal significantly predicted psychological adjustment $F(5, 32) = 4.366, p = 0.004$ accounting for 31% (Adjusted R^2) of the variance in the dependent variable. The Beta coefficient for the horizontal-collective dimension $\beta = .76$ stands out from the other dimensions of self-construal by making the largest unique contribution to psychological adjustment while independent self-construal at $\beta = .09$ offers the least. This result indicates that on-campus relationships among their student peer group are an important factor in the psychological adjustment and wellbeing of Indian international students studying in New Zealand. The horizontal-collective dimension of interdependent self-construal probes the individual student's connectedness with other students and its contribution to self-construal. For Indian students, forming interrelationships with their peer group plays an important role in psychological well-being. This is an important finding for tertiary institutions that need to incorporate strategies that facilitate contact between students on-campus to support the development of meaningful friendships.

Table 11

Predicting Psychological Adjustment from the Interdependent and Independent Dimensions of the Sixfold Self Construal Scale

Variable	Without Gender				With Gender			
	B	SE B	β	<i>p</i>	B	SE B	β	<i>p</i>
Gender					-.234	.226	-.163	.309
VR self-construal	.072	.154	.110	.643	.124	.162	.190	.448
HR self-construal	-.171	.137	-.319	.219	-.213	.142	-.397	.144.
VC self-construal	.088	.128	.144	.499	.066	.129	.109	.612
HC self-construal	.469	.181	.755	.014	.520	.187	.838	.009
Independent-self-construal	-.051	.133	-.092	.706	.048	.133	-.086	.724
R^2	.406				.425			
Adjusted R^2	.313				.314			
<i>p</i> value	.004				.006			

VR: Vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective

Adding gender to the model again had an almost negligible effect on overall variance within the model but the unique contribution made by the horizontal-collective dimension increased, suggesting that interaction with other students may be of greater importance for the psychological adjustment of one gendered group.

3.6 Bicultural Self-Construal and Adjustment

Bicultural self-construal is defined as possessing a self-system that enables the individual to sample either an interdependent or independent self-construal as the context demands. In order to do this an international student must demonstrate evidence of integrating both self-views. Hypothesis 3 is an amalgamation of the first two hypotheses. The first hypothesis suggests that Indian students activate an independent self-view in social settings that do not centre on the extended family group. Within the close family network these students present a more interdependent self which is consistent with the focus on close family ties within Indian culture. This flexibility to adjust focus provides evidence of a bicultural identity as students demonstrate they are able to adjust their inter-relational style according to the demands of the context.

A bicultural identity allows the student to successfully negotiate the demands of the social environment resulting in less stress. Hypothesis 2 indicates that psychological adjustment, which is associated with the international student's sense of well-being in the host culture, is predicted by the horizontal-collective dimension of self-construal. Being able to interrelate with students on-campus increases the potential for friendships and social connectedness enhancing adjustment (Lee et al., 2008). This is an important observation as international students who have predominantly been in New Zealand for less than 12 months are demonstrating that they feel comfortable with life in New Zealand.

Ward and Kennedy (1993a) indicate that psychological adjustment is influenced by the level of socio-cultural adjustment which linear regression has shown in this study, is not predicted by self-

construal. However, an important indicator of socio-cultural adjustment includes fluency in the host language. Descriptive statistics show higher mean scores for both confidence and competence with the English language among the Indian students studied. A Pearson product-moment correlation analysis revealed a significant relationship between English language confidence and psychological adjustment $r(35) = .41, p = .01$ but not with socio-cultural adjustment $r(35) = .19, p = .26$. A similar correlation using the IELTS mean score failed to show any relationship between English language competence and psychological $r(33) = .00, p = .99$ or socio-cultural adjustment $r(32) = -.03, p = .85$.

It is therefore possible to say there is some support for the third hypothesis showing that a bicultural identity is positively linked with psychological adjustment and that English language confidence also has some bearing on psychological adjustment, which in turn may support the overall adjustment of Indian international students. A larger sample is required to more confidently explore the relationship between English language and the adjustment of Indian students.

3.7 Social Connectedness and English Confidence as Mediating Variables

A final aim of this study was to investigate whether social connectedness and English language confidence have a mediating effect on the relationship between self-construal and socio-cultural and psychological adjustment. A series of regression analyses revealed that each variable has a partial mediating effect on varying dimensions of self-construal and each of the adjustment variables offering some support for the fourth hypothesis.

The steps taken to test mediation followed the process outlined by Jose (2013) who recommends establishing the correlation between the three variables to determine significance as a basis for performing the mediation analysis. The first step involved undertaking a Pearson's product-moment correlation coefficient analysis to assess whether the predictor variable, in this study each self-construal dimension, was significantly correlated with the two outcome variables, socio-cultural adjustment and psychological adjustment. The second step studied the relationship between the

self-construal as the predictor variable with each one of the two mediating variables, social connectedness and English language confidence.

Table 12 summarises the correlations and demonstrates that a number of significant relationships exist. Both of the mediating variables can be seen to interact with horizontal-relational, vertical-collective and horizontal-collective dimensions of self-construal and both adjustment variables. While socio-cultural adjustment is strongly correlated with the vertical-relational $r = 0.456$, $n = 39$, $p = 0.004$ and independent self-construal $r = 0.432$, $n = 38$, $p = 0.007$, neither of these two dimensions has a significant relationship with either of the two mediating variables so were discounted from any mediation analysis. However, as the vertical and horizontal-collective dimensions of self-construal are significantly correlated with three of the four variable combinations outlined in Table 12, those that were not (vertical-collective self-construal and social connectedness, and horizontal-collective self-construal and socio-cultural adjustment), were also subjected to mediation. Jose (2013) suggests that it is possible to explore the presence of a mediation effect even though a significant correlation does not exist between all three variables.

Table 12

Correlations between Predictor Variables: Interdependent and Independent Self-Construal Dimensions, Outcome Variables: Socio-cultural Adjustment and Psychological Adjustment and Mediation Variables: Social Connectedness and English Language Confidence

Variables	Vertical-Relational Self-Construal	Horizontal Relational Self-Construal	Vertical-Collective Self-Construal	Horizontal-Collective Self-Construal	Independent Self-construal
Socio-cultural Adjustment	.004**	.042*	.049*	.077	.007**
Psychological Adjustment	.117	.016*	.000**	.001**	.026*
Social Connectedness	.190	.030*	.714	.041*	.538
English Language Confidence	.688	.149	.000**	.003**	.273

** Correlation is significant at $p < 0.01$ (2-tailed).

* Correlation is significant at $p < 0.05$ (2-tailed).

Standard linear regression was used to assess the mediational effect of both social connectedness and English language confidence. Table 11 indicates that both mediating variables produce a partial mediating effect on different combinations of the predictor and outcome variables. Social-connectedness plays a significant role in partially mediating the relationship between the two collective dimensions of interdependent self-construal and psychological adjustment. However, the Sobel test, used to measure the significance of the size of the mediation effect, shows neither results produced a significant size effect.

Table 13

Mediating Effects of Social-Connectedness on Self-Construal Dimensions with Significant Correlations between Predictor, Outcome and Mediating Variables

Mediating variable:	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>	95% CI		
						Lower	Upper	<i>z</i>
Social-connectedness								
Socio-cultural adjustment:								
HR self-construal	.051	.091	.98	.560	.579	-.134	.236	.596
VC self-construal	.094	.099	.153	.946	.351	-.108	.296	.730
HR self-construal	.032	.105	.053	.303	.764	-.182	.246	.082
Psychological adjustment:								
HR self-construal	.075	.090	.142	.835	.410	-.108	.258	.433
VC self-construal	.232	.092	.371	2.531	.016*	.045	.418	.712
HC self-construal	.275	.093	.447	2.957	.006*	.086	.464	.084

* Partial mediation significant at the $p < 0.05$ level

VR: Vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective, Ind: Independent

In this sample of Indian international students it is the mediating effect of English language confidence on the relationship between the horizontal-collective dimension of self-construal and psychological adjustment that proved to be the most significant $R^2 = 0.31$, $F(2, 34) = 7.791$, $p < .05$. This was the only mediating relationship to result in a significant effect size $z = 2.06$, $p < .05$. This indicates that Indian students who are confident in their use of English are more equipped to engage

with fellow students contributing towards a greater sense of wellbeing. This reiterates earlier observations that show that Indian students value being able to connect with other students and feeling confident about their own language skills facilitates their adjustment process.

Table 14

Mediating Effects of English Language Confidence on Self-Construal Dimensions with Significant Correlations between Predictor, Outcome and Mediating Variables

Mediating variable: English language confidence	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>	95% CI		<i>z</i>
						Lower	Upper	
Socio-cultural adjustment:								
VC self-construal	.057	.128	.093	.445	.659	-.204	.319	.658
HC self-construal	.056	.117	.092	.475	.638	-.183	.294	.638
Psychological adjustment:								
VC self-construal	.141	.119	.226	1.190	.243	-.100	.383	.253
HC self-construal	.269	.099	.436	2.709	.010*	.067	.470	.040**

* Partial mediation is significant at $p < 0.05$

** Partial mediation effect size is significant at $p < 0.05$

VR: vertical-relational. HR: Horizontal- relational, VC: Vertical-collective, HC: Horizontal-collective, Ind: Independent

While the ability to fully explore each hypothesis is possibly restricted by the sample size, the findings that have been obtained provide a preliminary understanding of Indian international students and offer directions that may guide further research activity around their adjustment to life in New Zealand.

CHAPTER 4 - DISCUSSION

Literature describing self-construal and international students' adjustment to life in their host country is contained within an expansive body of literature developed over more than three decades. This research study focuses on a specific ethnic group and the way self-construal influences adjustment. The discussion will be limited to those areas that arise from this narrow focus of the wider subject area. In so doing it is acknowledged that though other important areas related to the acculturation and adjustment are not included, they are no less important and could form the basis of a wider study of this particular student group.

4.1 Indian International Students' Self-Construal

This study sought to uncover whether Indian students, who come from a collectivist culture strongly influenced by traditional closely knit extended family structures, would present with a more dominant interdependent than independent self-construal. A richer understanding of student self-construal was obtained by the use of the more recently developed bi-dimensional measure of self-construal, the SFSC Scale (Harb & Smith, 2008). This measure is superior to earlier widely used scales as it recognises the multi-dimensional nature of interdependent self-construal and provides more sensitive assessment of the contribution of each one to Indian student's self-system. The findings offer variable support for the first hypothesis by indicating that Indian students do not have a predominantly interdependent self-construal but are closer to being equally balanced in their interdependent and independent self-systems.

A more dominant vertical-relational self-construal is not surprising given Indian students come from a traditional cultural background that emphasises a 'familial self' (Roland, 1988) and hierarchical social systems aligned with vertical collectivism. However, the students in this study rate independent self-construal above the other interdependent dimensions. These findings are consistent with other student groups from traditional non-western cultures who are considered to

be more collective in their orientation (Harb & Smith, 2008). Further lack of support for the first hypothesis arises when all four interdependent dimensions of the SFSC scale are amalgamated, producing a more definite shift towards independent self-construal as the dominant self-view of this group. The appearance of a clear independent self-construal indicates that this group of students appear to have a reasonably balanced interdependent/independent self-view. The presence of both forms of self-construal equips students with the ability to activate a self-construal that is context salient and is consistent with bicultural identity formation. This is somewhat surprising as the majority of Indian students in this study had been in New Zealand for 12 months or less, which would suggest a limited timeframe within which to develop and strengthen an independent self-view to foster a bicultural identity. The appearance of a strong independent self-construal so early in their association with New Zealand suggests that Indian students arrive with an embedded independent self-system that is boosted through engagement with the New Zealand tertiary educational environment and participation within the local community.

There are limited Indian international student comparison groups to assess whether this is typical of Indian students abroad or an extension of what is found among students in India. Comparisons with studies of domestic Indian students suggest this is not an isolated finding as it is clear that a blended self-construal is found among students in various geographical regions of India (Kapoor et al., 2003; Misra & Giri, 1995). A large study including students from various locations within India reveals a complex array of individualistic and collectivist expressions with collectivist approaches dominant in matters related to the family and individualistic attitudes dominating personal activities (Sinha et al., 2002). The level of horizontal-collective self-construal found among participants in this current study is consistent with the perception of their peers studying in India. When compared with American domestic university students, Indian tertiary students respond as vertical collectives when presented with a series of scenarios but demonstrate stronger patterns of horizontal collectivism in a within-groups comparison (Verma & Triandis, 1999). While the horizontal dimensions of self-construal were not so dominant in this study, when compared with the ethnic groups studied by Harb and Smith

(2008), Indian students show a clearer preference towards being similar to others and fitting-in than those from other non-western cultures. While not as influential as other dimensions of self-construal, Indian international students appear to attribute more importance to establishing connections with fellow students than other ethnic groups. Being an international student may influence this but it may be similarly evident among Indian students within their own country and may be a unique Indian attribute. A clearer understanding of the factors that influence each dimension of interdependent self-construal is required, based on a larger representative sample study, before it is possible to suggest unique cultural expressions of interdependent self-system.

Consistent with other studies of Indian domestic students is the gender difference in self-construal, with Indian female students appearing to possess a stronger independent and interdependent self-construal than Indian males (Jha & Singh, 2011; Misra & Giri, 1995). It is not clear why this gender difference emerges as both groups are actively involved in pursuing higher education which is often associated with greater individualism. Studies in India show that increasing numbers of Indian women are well-educated professionals and more individualistic than their male counterparts. However, Indian women also carry the responsibility of being guardians of the culture by observing and passing on traditional family values. International studies describe an increase in 'Indianess' among migrant Indians often demonstrated in Indian parents observing restrictive traditional approaches towards their daughters intermingling with host nationals and not condoning the social practice of dating (Dasgupta, 1998). As a result Indian girls and young women are afforded less liberties than their male peers and are seen to be more marginalised in their adopted country (Farver et al., 2002). This is inconsistent with integration and the formation of a bicultural identity. How Indian females make the transition to becoming apparently more bicultural than Indian males, as seen in this study, is not described in the literature. The situation seems somewhat contradictory as the weight of cultural responsibility on women to observe and maintain traditional Indian family norms and values following migration appear at odds with bicultural identity formation. However, in line with social identity theory Indian women may be highly motivated to 'fit-in' and develop

strategies that enable them to become more attuned to social situations within the host environment. Engagement within the broad social context of the host nation facilitates the acquisition of a bicultural identity with increased levels of education and language competence supporting the capacity to become more contextually competent.

The factors that specifically support bicultural identity acquisition among female Indian international students and how, or whether, they differ from their second generation migrant counterparts are not reported in the literature. A study of Indian self-construal appears to raise more questions than answers and the limited study of this population of international students and migrants does little to resolve the contradictions. Further study is required to explore the development of a bicultural identity among Indian women in the face of cultural constraints and may provide more insight into why they emerge as having a more obvious independent self-system than Indian men.

This study failed to find any association between self-construal and length of stay in New Zealand and due to a lack of literature dealing specifically with this relationship, it is not possible to establish the significance of this finding, given the sample size. The closest area of inquiry is a longitudinal study of Japanese exchange students in New Zealand by Ward, Okura, Kennedy, and Kojima (1998) who found student adjustment improved over time. This study did not explore student self-construal or their acculturation style to suggest any patterns associated with levels of adjustment. Unlike studies undertaken in India, a third area of this study considering a student's home state in India did not find any regional patterns in interdependent and independent self-construal. A large study involving students across India found higher levels of collectivist attitudes among those from northern areas than students in Central India while students from southern India were the least collectivist (Sinha et al., 1994).

The students in this study appear to be consistent with students in India who are described as being both individualistic and collectivist. The SFSC scale demonstrates the unique characteristics of Indian students' self-construal but does not show that they are more interdependent than independent

indicating little support for the first hypothesis and more support for this group of students being bicultural.

4.2 Adjustment

4.2.1 Socio-cultural Adjustment

At the time of responding over half the participants in this study had been in New Zealand less than six months and the mean score of 3.51 in a scale that ranged from 1-5 indicates that these students are having little difficulty fitting into life in New Zealand. It is not immediately clear why the Indian students in this study report higher levels of adjustment so early in their sojourn. It is generally accepted that most international students adjust to their new environment with the passage of time (Ward & Kennedy, 1992), by becoming increasingly familiar with the cultural norms, the language of the host country and developing meaningful relationships as they settle (Ward & Kennedy, 1993a). The positive response in this area of the study suggests the process may be accelerated for Indian students or that they arrive equipped to more readily accommodate challenges associated with settling in New Zealand. It may also highlight factors unique to New Zealand. The pattern of adjustment is somewhat similar to that of Japanese students enrolled at a private education facility in New Zealand who were followed over a 12 month period following their arrival. Adjustment difficulties were greatest in the initial months following arrival but progressively improved after four months with little change over the ensuing six to 12 month period (Ward et al., 1998).

The most obvious challenge confronting Indian students on arrival in New Zealand is the rather large difference or cultural distance between Indian and New Zealand cultures which is identified as a factor in socio-cultural adjustment (Searle & Ward, 1990). However, the positive results from the socio-cultural adjustment scale suggest that cultural difference does not emerge as an issue of concern for these students. A similar picture is seen with Indian international students in North America who appear to settle with greater ease in a Western culture than students from other non-

European cultural backgrounds. Enhanced adjustment is attributed to India's historical exposure to Western ways and an increasing Western influence in professional education throughout the country (Gupta & Panda, 2003). Rather than cultural differences challenging Indian students, the difference in the size of the population in provincial New Zealand and associated environmental stimuli may require some reorientation for those used to more densely populated large metropolitan centres. However, adjusting to a physical location may not have the same accompanying levels of stress or dissonance that is described by international students struggling to negotiate the unfamiliar cultural ways and educational processes.

Higher early levels of adjustment among students in this study can also be attributed to greater competence and confidence with the English language. Students arriving with a broader language skill base could explain the lack of a mediation effect of English language confidence on the relationship between self-construal and socio-cultural adjustment in this group. However, the importance of English language fluency and confidence in both socio-cultural and psychological adjustment is well established in the literature concerning international students (Yang et al., 2006; Yeh & Inose, 2003). It may be the combination of higher levels of independent self-construal and language fluency that explain increased levels of adjustment among these students early in their stay. A study of international students in Canada found that independent self-construal predicted English language confidence and reported that students from collectivist cultures with higher levels of independent self-construal were more adjusted (Yang & Noels, 2013).

An important characteristic of this group which is not widely explored in studies of international student adjustment is the educational background that students bring to their experience. Almost half the students in this study were qualified health professionals undertaking health-related programmes. While assessing the influence of a student's educational background was not an aim of this study, their prior educational achievement could have had a significant impact on overall adjustment of this group. Students who are health professionals are familiar with negotiating often

complex systems in their own countries and they tend to be more skilled in English in order to meet entry requirements for post-graduate programme study in New Zealand. This study also shows that Indian students actively seek employment in an area related to their field of study. It is reasonable to assume that the 17 respondents from a health related programme are likely to be well represented in 53% of participants employed at the time of the study. This constellation of factors contributes towards feeling settled in a foreign country. These observations are supported by Choi and Thomas (2009) who found in a study of Asian international students in the United States, that Indian students were generally more highly educated, had greater fluency in English and reported a more positive acculturation experience.

The additional skill base of students in this study enables them to gain employment which in turn eases the financial burden carried by many international students and is likely to relieve what may be a potentially significant stress. Employment further increases their exposure to English, provides a practical base for many to cement their academic study and increases their sense of belonging and participation in the local community. It is possible that standard measures of socio-cultural adjustment do not tap into areas that influence the adjustment of Indian students, particularly those who are already well qualified and seek international student status as a passport towards immigration. This is a well-established pathway for Indian international students in New Zealand. In the 2012/2013 financial year approximately 39,000 migrants were approved for residence in New Zealand with many of the 13% coming from India reported to be former international students seeking residence under the skilled migrant criteria (Ministry of Business, 2013).

4.2.2 Psychological Adjustment

Acculturation and adjusting to life is reported as stressful for many international students, resulting in mental health concerns. This study did not focus on measuring stress or symptoms of mental illness; rather, the focus was directed towards understanding psychological adjustment in terms of

Indian students' satisfaction with life in their new environment. The findings suggest that relocation to New Zealand has been a positive experience for most Indian students as a mean score of 3.63 for psychological adjustment suggests many enjoy above average levels of psychological welling and are positive about their life in New Zealand. In order to cope with the change, International students face a number of important challenges which include developing satisfying and supportive host and co-national friendships with fellow students, dealing with academic challenges and overcoming homesickness. A student's acculturation style and exposure to discrimination are both potential stressors that may impact on an international student's psychological wellbeing and adjustment.

In a study of the predictors of socio-cultural and psychological adjustment, social connectedness stands out as an important factor in the overall adjustment and psychological well-being of international students (Zhang & Goodson, 2011b). This observation is supported in the findings of the current study with social connectedness shown to have a partial mediating effect on the psychological adjustment of Indian international students. A similar effect is seen in a large study of Chinese students in the United States in which social connectedness fully mediated the relationship between acculturation and psychological wellbeing and partially mediated the relationship with socio-cultural adjustment (Zhang & Goodson, 2011a). The partial mediating effect of the horizontal-collective dimension of Indian student's self-construal highlights their interest in connecting with other students.

Having the skills to successfully interact with the host and heritage communities increases self-efficacy and is an important link between social connectedness and psychological adjustment. Social interaction with host nationals has been shown to mediate the relationship between cross-cultural self-efficacy and the socio-cultural adjustment of Asian international students (Li & Gasser, 2005). Increased social connectedness enables international students to take advantage of social opportunities to build confidence and extend their social network (Zhang & Goodson, 2011a). The Indian students in this study possess a number of factors that enhance self-efficacy including being

well-educated, having good linguistic abilities and evidence of a bicultural identity supporting social connectedness on-campus and within New Zealand society.

In addition, bicultural competence is also built around a student being able to effectively accommodate both the host and their own ethnic culture. The current study is consistent with Yoon, Lee and Goh's (2008) research involving Korean international students in the United States. They found that being socially connected with members of the students' own ethnic community fully mediated the relationship between acculturation and wellbeing and partially mediated the relationship with host nationals. In this study the authors draw attention to the multiplicity of factors that may have both a direct and indirect effect on mediating the wellbeing of international students. They draw attention to the importance of demographic and educational variables, which can also be seen in this present study of Indian international students.

Being connected could also include using a variety of means to maintain important family and cultural links. While use of social media to maintain contact with family and cultural links was not explored in this study, Raman and Harwood (2008) suggest that Indian students' reliance on Indian media and social networks acted as a barrier to acculturation. Enculturation and contact with the heritage community is shown to have a positive association supporting the link between social connectedness and adjustment. The relational aspects of Indian students' self-construal suggest that rather than being a barrier, the use of social media may enhance their acculturation experience and provide important social support to facilitate their adjustment experience. The role of social media in connectedness and adjustment requires further investigation to identify whether it is indeed a barrier or an important and effective tool employed by Indian students settling in New Zealand.

The attitudes of the host nation towards migrants, and immigration policies play a role in the adjustment of new settlers. Discrimination and racism are often reported as contributing towards greater stress among international students. In a study exploring the issue, Indian students were among a group of international students from non-western countries who perceived they were

enduring higher levels of discrimination than their peers from European and English speaking backgrounds (Lee & Rice, 2007). Their experience of New Zealand society will influence how well Indian international students settle. In general, these students will experience a society that has immigration policies and a population that welcomes and is supportive of new migrants. In a recent survey of attitudes towards multiculturalism, New Zealand leads 17 other countries with 89% of the population supporting cultural diversity and in favour of integration of migrants within New Zealand society (Ward & Masgoret, 2008). The higher level of psychological adjustment of the students being studied suggests that the openness and acceptance of cultural diversity within New Zealand towards international students and Indian migrants supports their adjustment. Waiariki Institute of Technology actively celebrates the diversity of its students with international events and acknowledges significant cultural festivals or important national dates of the major ethnic communities represented at the Institute. This serves to reinforce a sense of belonging for students and promotes cross-cultural understanding. Increased intercultural contact leads to less stereotyping, prejudice and discrimination (Duru & Poyrazli, 2011).

The findings of this study show that the socio-cultural adjustment of Indian international students has an important influence on their psychological adjustment. Feeling connected within their student environment and the positive attitude of New Zealanders toward immigrants, both favour the psychological adjustment of this group.

4.3 Biculturalism

Indian students appear to embrace an integration strategy and emerge early in their student life in New Zealand as showing clear indications of a bicultural identity. This suggests they are comfortable negotiating the demands of both the New Zealand cultural environment and their own heritage interactions. The ability to move confidently within these diverse settings and adapt to the context requirements of each is consistent with having a bicultural identity. Integration, which supports

bicultural identity development, is found to be the acculturative strategy that produces the most positive migrant adaptation (Berry, 2006b).

Evidence of Indian students in this study having a bicultural identity and their associated positive socio-cultural and psychological adjustment is supported by the findings of a large meta-analysis examining this area. Nguyen and Benet-Martínez (2013) identified that bicultural migrants were more adjusted within their adopted culture, they were more adept at developing supportive social networks and appeared to have a range of skills that support their adjustment. In contrast, an assimilation strategy is associated with higher levels of distress as shown in a study of Chinese students in Germany who reported more psychological difficulties and higher rates of depression linked with this acculturation approach (Shim et al., 2014).

As well as the factors that support socio-cultural and psychological wellbeing, two additional factors that promote an integration strategy are the attitude of the host culture towards migrant populations and the willingness of the migrants to integrate, both of which have been touched on in this discussion. As this study shows, Indian international students appear to have a greater capacity and willingness to pursue an integration strategy and cultivate a bicultural identity.

The link between biculturalism and adjustment is not fully understood as it is unclear whether having a stronger bicultural identity facilitates adjustment or being more adjusted within the host culture encourages biculturalism. As the findings in this study show, it may be the former that applies to Indian international students as they seem to have an advantage in terms of an integrated self-construal and a number of acculturative competencies that augment adjustment.

Indians are also described as being more contextually sensitive (Sinha et al., 2001), able to adjust to and accommodate dichotomy with greater flexibility. This capacity underpins the bicultural strategy of cultural frame-switching whereby individuals faced with the challenges of adjusting to cultural demands are able to evoke an identity that enables them to fit into, rather than be at odds with a

social group. Further research is required in this area of bicultural identity formation to understand how the process unfolds for Indian students and the strategy they employ in achieving a bicultural identity.

4.4 Limitations

As one of the few studies known to focus specifically on Indian international students, this current study offers the opportunity to obtain some initial understanding about the self-construal and adjustment of these students within New Zealand. However, there are a number of significant limitations that restrict the representativeness of the findings. The limitations generally relate to a lack of randomisation, the size and characteristics of the sample and potential language issues.

A significant limitation is the small sample recruited to participate and the characteristics of the study group. A sample of 39 students represents a very small number of the over 500 Indian students enrolled at Waiariki Institute of Technology who were eligible to participate. It is difficult to assume that the results of this study are likely to be representative of Indian students within this tertiary setting, even less so Indian international students across New Zealand. While this study provides an indication of Indian international students' experiences, further research based on a large sample of Indian students drawn from a number of tertiary institutions is required to fully explore the areas investigated before it is possible to confidently claim representation.

Obtaining such a sample may be an issue given the difficulties that arose in recruiting students for this study. A review of the literature relating to Indian migrants suggests this is not an isolated example. Taylor's (1948) observations of Indians may provide some helpful insights to make sense of the difficulties observed in involving this ethnic group in research studies. The Hindu focus is directed towards the collective and particularly the in-group, those most significant to the individual. Hindu approaches to life outlined in Dharma, the Hindu equivalent of a moral code for life, emphasises conformity to group rather than individual expression. Similarly the philosophy of karma

focuses individual's attention towards those activities that contribute towards a better afterlife. In the light of these observations undertaking an online survey could be construed by some Indian students as a superfluous activity that is contrary to the Indian selfhood and detracts from building karma. This is entirely speculative and lacks any confirmation, however, it raises the issue of how to understand a group that are among the least studied within New Zealand nationally and globally, but who represent a rapidly expanding international student population in both domains.

One possible explanation for the poor response rate could relate to online survey being offered in English. While the study demonstrated that many Indian students have good English language skills, not all the students share the same ability. Those who are less fluent may not have had the confidence to undertake the survey. Language challenges may also influence students to be less discriminatory in the way they respond, potentially producing a less than accurate result.

A further limitation involves the gender imbalance with 63% of respondents being males. Further imbalance is seen in a number of other demographic variables included in this study. The majority of students who responded were undertaking courses at a higher educational level and many were enrolled in health programmes. These factors may be associated with a student's selfhood and set of adjustment competencies. In addition, the majority of students in the sample came from the northern areas of India. With reported regional differences in self-construal found in India, the small sample size may have been unable to draw out any subtle influences this aspect has on student self-construal and adjustment. A larger more diverse sample is required to address the imbalances that are highly likely to have distorted a number of the findings.

The experiences of Indian students at Waiariki Institute of Technology may differ from those at other tertiary facilities within New Zealand. How Indian international students settle and feel connected within a provincial location may differ for those Indian students enrolled in tertiary institutions in larger urban centres. A study that compares experiences across a number of locations is required to more accurately assess student adjustment.

A cross-sectional design limits representation due to a lack of randomisation and the narrow time frame during which students are studied. An online survey relies on self-selection and the positive experience of this group may reflect factors associated with those who responded rather than those that are typical of Indian international students in New Zealand. Those who chose to respond may be more highly motivated in many areas of life including adopting a positive approach towards settling in New Zealand. Unfortunately, nothing is known about the self-construal and adjustment of the vast majority of Indian students who chose not to respond.

While a great degree of caution is required before conclusions can be drawn from this study, the findings offer some insight into a group of international students that have not been previously investigated. There is the potential to be quietly optimistic that many Indian international students enjoy a positive experience, integrate and adjust to life in New Zealand and go on to become permanent residents, as shown by the New Zealand migration statistics (Ministry of Business, 2013).

4.5 Opportunities for further Research

While limited in a number of ways, this study points to opportunities for further investigations to develop a greater understanding of Indian international students. A number of these have been identified throughout this document where differences have been identified or may be apparent due to the size of the study sample. Those areas that could build on and extend this current study will be identified for discussion.

Indians in general appear to be a difficult group to engage in research activity. There may be cultural reasons for their reluctance to participate which requires further investigation. As they are a prominent migrant group in New Zealand, understanding the experiences of Indian international students is important and a larger study is required to confirm and expand the preliminary insights that have been gained from this limited study. Further inquiry should focus on including students

from a broader range of tertiary settings within New Zealand to assess whether there are unique factors relating to size or the type of tertiary institution that influence adjustment.

A longitudinal study of Indian international students would add greater clarity to their process of adjustment. Assessing students in India before arrival in New Zealand would help to identify the level of bicultural self-construal that students have to support a smoother transition to life in New Zealand. In addition, critical time points in the students' adjustment journey would be revealed with a longitudinal design that could extend to examining integration into the wider community after completing their studies.

An investigation of the factors that influence Indian student adjustment to the New Zealand academic environment, and life in general in this country would help to isolate what makes a difference for this ethnic group. Similarly a comparative study of different ethnic groups would highlight whether Indian students are better equipped than international students from other destinations to transition to academic life and study in New Zealand.

4.6 Implications for Practice

This small study highlights that while international student share a common set of adjustment challenges, not all student groups will respond in the same manner. The indication that social-connectedness plays an important role in the adjustment of Indian international students suggests that opportunities to facilitate student interaction and social network formation will enhance their experience.

Strategies employed to reduce cultural distance are important in supporting socio-cultural adjustment. These may include tertiary institutions offering orientation programmes for international students, familiarising students with on-campus life and New Zealand society, commencing from the time of their application and upon arriving to commence a course of study.

In conclusion, this limited study adds to the body of knowledge relating to international students' self-construal and its impacts on adjustment. The study highlights the value of an assessment tool that provides a comprehensive examination of interdependent self-construal and its relevance in studying the experiences of international students. It also reiterates the importance of a number of critical factors that support student adjustment and integration within their adopted culture. More importantly, this study provides some preliminary understanding of Indian international students within a New Zealand context and the interplay between self-construal and adjustment. While there are a number of limitations, the study offers directions for further research involving a student group who are increasing in numbers in the New Zealand education sector and are having a significant impact on this country's cultural diversity.

REFERENCES

- Atri, A., Sharma, M., & Cottrell, R. (2006). Role of social support, hardiness, and acculturation as predictors of mental health among international students of Asian Indian origin. *International Quarterly of Community Health Education*, 27(1), 59-73. doi: 10.2190/IQ.27.1.e
- Baumeister, R. (1998). The self. In D. Gilbert, S. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 680-740). Boston, MA: McGraw-Hill.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Baumeister, R., Shapiro, J. P., & Tice, D. M. (1985). Two kinds of identity crisis. *Journal of Personality*, 53(3), 407-424.
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. W. (2002). Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-Cultural Psychology*, 33(5), 492-516. doi: 10.1177/0022022102033005005
- Berry, J. (1990). Psychology of acculturation. In J. J. Berman (Ed.), *Nebraska Symposium on Motivation, 1989: Cross-cultural perspectives*. (pp. 201-234). Lincoln, NE University of Nebraska Press.
- Berry, J. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. Balls Organista & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research*. (pp. 17-37). Washington, DC: American Psychological Association.
- Berry, J. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 6(6), 697. doi: 10.1016/j.ijintrel.2005.07.013
- Berry, J. (2006a). Contexts of acculturation. In D. Sam & J. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 27-42). Cambridge, England: Cambridge University Press.
- Berry, J. (2006b). Stress perspectives on acculturation. In D. Sam & J. Berry (Eds.), *Acculturation psychology* (pp. 43-57). Cambridge, United Kingdom: Cambridge University Press.
- Berry, J., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), 491-511. doi: 10.2307/2546607
- Berry, J., & Sam, D. (1997). Acculturation and adaptation. In J. Berry, M. Segall & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology, Vol. III: Social behaviour and applications* (2nd ed., pp. 291-326). Boston, MA: Allyn & Bacon.
- Bharati, A. (1985). The self in Hindu thought and action. In A. Marsella, G. DeVos & F. Hsu (Eds.), *Culture and self. Asian and western perspectives* (pp. 185-230). New York, NY: Tavistock.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475-482. doi: 10.1177/0146167291175001
- Butcher, A., & McGrath, T. (2004). International students in New Zealand: Needs and responses. *International Education Journal*, 5(4), 540-551.
- Cheung, C., & Yue, X. D. (2013). Sustaining resilience through local connectedness among sojourn students. *Social Indicators Research*, 111(3), 785-800.
- Choi, J. B., & Thomas, M. (2009). Predictive factors of acculturation attitudes and social support among Asian immigrants in the USA. *International Journal of Social Welfare*, 18(1), 76-84.
- Clement, N. (2010). Student wellbeing at school: The actualization of values in education. In N. Clement, T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing*. (pp. 37-62). New York, NY: Springer.
- Clément, R., & Baker, S. (2001). *Measuring social aspects of L2 acquisition and use: Scale characteristics and administration*. Ottawa, Canada: University of Ottawa.
- Constantine, M. G., Okazaki, S., & Utsey, S. O. (2004). Self-concealment, social self-efficacy, acculturative stress, and depression in African, Asian, and Latin American international college students. *American Journal of Orthopsychiatry*, 74(3), 230-241. doi: 10.1037/0002-9432.74.3.230

- Coolican, H. (2009). *Research methods and statistics in psychology* (5th ed.). London, UK: Hodder Education.
- Cross, S. (1995). Self-construals, coping, and stress in cross-cultural adaptation. *Journal of Cross-Cultural Psychology, 26*(6), 673-697. doi: 10.1177/002202219502600610
- Cross, S., & Gore, J. (2012). Cultural models of self. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 587-613). New York, NY: The Guilford Press.
- Cross, S., Hardin, E. E., & Gercek-Swing, B. (2011). The what, how, why, and where of self-construal. *Personality and Social Psychology Review, 15*(2), 142-179. doi: 10.1177/1088868310373752
- Dasgupta, S. D. (1998). Gender roles and cultural continuity in the Asian Indian immigrant community in the U.S. *Sex Roles, 38*(11-12), 953-974.
- Dhruvarajan, V. (1993). Ethnic cultural retention and transmission among first generation Hindu Asian Indians in a Canadian Prairie city. *Journal of Comparative Family Studies, 24*(1), 63-79.
- Duru, E., & Poyrazli, S. (2007). Personality dimensions, psychosocial-demographic variables, and English language competency in predicting level of acculturative stress among Turkish international students. *International Journal of Stress Management, 14*(1), 99-110. doi: 10.1037/1072-5245.14.1.99
- Duru, E., & Poyrazli, S. (2011). Perceived discrimination, social connectedness, and other predictors of adjustment difficulties among Turkish international students. *International Journal of Psychology, 46*(6), 446-454.
- Farver, J. A. M., Bhadha, B. R., & Narang, S. K. (2002). Acculturation and psychological functioning in Asian Indian adolescents. *Social Development, 11*(1), 11-29.
- Geeraert, N., Demoulin, S., & Demes, K. A. (2014). Choose your (international) contacts wisely: A multilevel analysis on the impact of intergroup contact while living abroad. *International Journal of Intercultural Relations, 38*, 86-96.
- Geertz, C. (1975). On the nature of anthropological understanding. *American Scientist, 63*(1), 47-53. doi: 10.2307/27845269
- Gergen, K. (1971). *The concept of self*. New York, NY: Holt, Rinehart and Winston.
- Glass, C. R., & Westmont, C. M. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations, 38*, 106-119.
- Gudykunst, L. B., Matsumoto, Y., StellaTing-Toomey, Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Human Communication Research, 22*(4), 510-543.
- Gupta, R., & Panda, A. (2003). Individualised familial self: The evolving self of qualified technocrats in India. *Psychology & Developing Societies, 15*, 1-29. doi: doi:10.1177/097133360301500102
- Harb, C., & Smith, P. B. (2008). Self-construals across cultures: Beyond independence-interdependence. *Journal of Cross-Cultural Psychology, 39*(2), 178-197. doi: 10.1177/0022022107313861
- Hausmann, L., Schofield, J., & Woods, R. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education, 48*(7), 803-839. doi: 10.1007/s11162-007-9052-9
- Hendrickson, B., Rosen, D., & Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations, 35*(3), 281-295.
- Higgins, E. T. (1996). The 'self digest': Self-knowledge serving self-regulatory functions. *Journal of Personality and Social Psychology, 71*(6), 1062-1083. doi: 10.1037/0022-3514.71.6.1062
- Ho, D. Y. F. (1995). Selfhood and identity in Confucianism, Taoism, Buddhism, and Hinduism: Contrasts with the west. *Journal for the Theory of Social Behaviour, 25*(2), 115-139. doi: 10.1111/j.1468-5914.1995.tb00269.x
- Hofstede, G. (1984). *Culture's consequence*. Newbury Park, CA: Sage.

- Hofstede, G., & Hofstede, G. J. (2005). *Cultures and organisations: Software of the mind*. New York, NY: McGraw-Hill.
- Hong, Y., Wan, C., No, S., & Chiu, C.-y. (2007). Multicultural identities. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology*. (pp. 323-345). New York, NY, US: Guilford Press.
- Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology, 17*(2), 225-248. doi: 10.1177/0022002186017002006
- Hwang, W., & Ting, J. Y. (2008). Disaggregating the effects of acculturation and acculturative stress on the mental health of Asian Americans. *Cultural Diversity and Ethnic Minority Psychology, 14*(2), 147-154.
- Ibrahim, F., Ohnishi, H., & Sandhu, D. S. (1997). Asian American identity development: A culture specific model for South Asian Americans. *Journal of Multicultural Counseling and Development, 25*(1), 34-50.
- IELTS. (2015). *IELTS 9-band score*. Retrieved from http://www.ieltsessentials.com/results/ielts_9-band_scale.aspx
- Inman, A. G., Howard, E. E., Beaumont, R. L., & Walker, J. A. (2007). Cultural transmission: Influence of contextual factors in Asian Indian immigrant parents' experiences. *Journal of Counseling Psychology, 54*(1), 93-100. doi: 10.1037/0022-0167.54.1.93
- Jha, S. D., & Singh, K. (2011). An analysis of individualism-collectivism across northern India. *Journal of the Indian Academy of Applied Psychology, 37*(1), 149-156.
- Ji, J. (2012). Chinese people's self-construal and its relationship with conflict management styles. *Public Personnel Management, 41*(5 (Special Issue)), 69-78.
- Johnson, F. (1985). The western concept of self. In A. Marsella, G. DeVos & F. Hsu (Eds.), *Culture and self: Asian and western perspectives* (pp. 91-138). New York, NY: Tavistock.
- Jose, P. E. (2013). *Doing statistical mediation and moderation*. New York: The Guilford Press.
- Kagitcibasi, C. (1990). Family and socialisation in cross-cultural perspective: A model of change. In J. J. Berman (Ed.), *Nebraska Symposium on Motivation 1989: Cross-cultural perspectives* (pp. 135-200). Lincoln, NE: University of Nebraska Press.
- Kagitcibasi, C. (1997). Individualism and collectivism. In J. Berry, M. Segall & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology. Social behaviour and applications*. (Vol. 3, pp. 1-50). Needham Heights, MA: Allyn & Bacon.
- Kakar, S. (1971). The theme of authority in social relations in India. *The Journal of Social Psychology, 84*(1), 93-101.
- Kakar, S. (2012). *The inner world: A psychoanalytic study of childhood and society in India*. New Dehli, India: Oxford India Perenials.
- Kammann, R., & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology, 35*(2), 259-265.
- Kapoor, S., Hughes, P. C., Baldwin, J. R., & Blue, J. (2003). The relationship of individualism-collectivism and self-construals to communication styles in India and the United States. *International Journal of Intercultural Relations, 27*(6), 683-700.
- Kashima, E. S., & Loh, E. (2006). International students' acculturation: Effects of international, conational, and local ties and need for closure. *International Journal of Intercultural Relations, 30*(4), 471-485.
- Kashima, Y., Yamaguchi, S., Kim, U., Choi, S.-C., Gelfand, M. J., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology, 69*(5), 925-937.
- Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. Thousand Oaks, Calif. ; London: Sage.
- Kitayama, S., Markus, H. R., & Lieberman, C. (1995). The collective construction of self esteem: Implications for culture, self, and emotion. In J. A. Russell, J.-M. Fernández-Dols, A. S. R. Manstead & J. C. Wellenkamp (Eds.), *Everyday conceptions of emotion: An introduction to*

- the psychology, anthropology and linguistics of emotion*. (pp. 523-550). New York, NY: Kluwer Academic/Plenum Publishers.
- Kumar, A., & Nevid, J. S. (2010). Acculturation, enculturation, and perceptions of mental disorders in Asian Indian immigrants. *Cultural Diversity and Ethnic Minority Psychology, 16*(2), 274-283.
- Kumar, S. K. (2008). Indian thought and tradition: A psychohistorical perspective. In K. R. Rao, A. Paranjpe & A. Dalal (Eds.), *Handbook of Indian psychology* (pp. 19-52). New Dehli, India: Cambridge University Press.
- LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114*, 395-412. doi: 10.1037/0033-2909.114.3.395
- Lee, J., & Rice, C. (2007). Welcome to America? International student perceptions of discrimination. *Higher Education, 53*(3), 381-409. doi: 10.1007/s10734-005-4508-3
- Lee, R. M., Dean, B. L., & Jung, K.-R. (2008). Social connectedness, extraversion, and subjective well-being: Testing a mediation model. *Personality and Individual Differences, 45*(5), 414-419. doi: 10.1016/j.paid.2008.05.017
- Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology, 48*(3), 310-318. doi: 10.1037/0022-0167.48.3.310
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance scales. *Journal of Counseling Psychology, 42*(2), 232-241. doi: 10.1037/0022-0167.42.2.232
- Lee, R. M., & Robbins, S. B. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology, 45*(3), 338-345. doi: 10.1037/0022-0167.45.3.338
- Leong, C., & Ward, C. (2000). Identity conflict in sojourners. *International Journal of Intercultural Relations, 24*(6), 763-776.
- Levine, T. R., Bresnahan, M. J., Park, H. S., Lapinsky, M. K., Wittenbaum, G. M., Shearman, S. M., . . . Ohashi, R. (2003). Self-construal scales lack validity. *Human Communication Research, 29*(2), 210-252. doi: 10.1111/j.1468-2958.2003.tb00837.x
- Li, A., & Gasser, M. B. (2005). Predicting Asian international students' sociocultural adjustment: A test of two mediation models. *International Journal of Intercultural Relations, 29*(5), 561-576. doi: 10.1016/j.ijintrel.2005.06.003
- Markus, H., & Cross, S. (1990). The interpersonal self. In L. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 576-608). New York, NY: The Guilford Press.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224-253. doi: 10.1037/0033-295X.98.2.224
- Marriott, M. (1976). Interpreting Indian Society: A monistic alternative to Dumont's dualism. *The Journal of Asian Studies, 36*(1), 189-195. doi: 10.2307/2053901
- Marsella, A., DeVos, G., & Hsu, F. (Eds.). (1985). *Culture and self: Asian and western perspectives*. New York: NY: Tavistock.
- Matsumoto, D. (1999). Culture and self: An empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construal. *Asian Journal of Social Psychology, 2*(3), 289-310. doi: 10.1111/1467-839X.00042
- Medora, N. P. (2007). Strengths and challenges in the Indian family. *Marriage & Family Review, 41*(1-2), 165-193.
- Mines, M. (1988). Conceptualizing the person: Hierarchical society and individual autonomy in India. *American Anthropologist, 90*(3), 568-578.
- Ministry of Business, Innovation and Employment. (2013). *Migration Trends Key Indicator Report: June 2013*. Wellington, New Zealand. Retrieved from <http://www.dol.govt.nz/research/migration/monthly-migration-trends/13jun/>

- Ministry of Education. (2013). *International student enrolments in New Zealand 2006-2013*. Wellington, New Zealand. Retrieved from http://www.educationcounts.govt.nz/data/assets/pdf_file/0012/115050/Enrolments-of-international-students-2006-2012.pdf
- Mishra, R. (1994). Individualist and collectivist orientations across generations. In U. Kim, H. C. Triandis, Ç. Kâğıtçıbaşı, S.-C. Choi & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. (pp. 225-238). Thousand Oaks, CA: Sage Publications, Inc.
- Mishra, R., & Sinha, S. (2012). Psychological dispositions and family values across generations in rural and urban settings. *Social Science International*, 28(1), 159-175.
- Misra, G. (2001). Culture and self: Implications for psychological inquiry. *Journal of Indian Psychology*, 19(1-2), 1-20.
- Misra, G., & Giri, R. (1995). Is Indian self predominantly interdependent? *Journal of Indian Psychology*, 13(1), 16-29.
- Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management*, 11(2), 132-148. doi: 10.1037/1072-5245.11.2.132
- Morf, C., & Mischel, W. (2012). The self as a psycho-social dynamic processing system: Towards a converging science of selfhood. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 21-49). New York, NY: The Guilford Press.
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development*, 78(2), 137-144.
- Morling, B., & Fiske, S. T. (1999). Defining and measuring harmony control. *Journal of Research in Personality*, 33(4), 379-414. doi: 10.1006/jrpe.1999.2254
- Neri, F., & Ville, S. (2008). Social capital renewal and the academic performance of international students in Australia. *The Journal of Socio-Economics*, 37(4), 1515-1538.
- New Zealand Education. (2014). *India*. Retrieved from <http://www.enz.govt.nz/markets-research/india>
- Nguyen, A.-M. D., & Benet-Martínez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology*, 44(1), 122-159. doi: 10.1177/0022022111435097
- Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity, and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology*, 15(3), 246-264. doi: 10.1177/0261927X960153003
- O'Reilly, A., Ryan, D., & Hickey, T. (2010). The psychological well-being and sociocultural adaptation of short-term international students in Ireland. *Journal of College Student Development*, 51(5), 584-598. doi: 10.1353/csd.2010.0011
- Organisation for Economic Co-operation and Development (OECD). (2014). *Education at a glance 2014: OECD indicators. Indicator C4 - Who studies abroad and where?* Retrieved from <http://www.oecd.org/edu/Education-at-a-Glance-2014.pdf>
- Oyserman, D. (2011). Culture as situated cognition: Cultural mindsets, cultural fluency, and meaning making. *European Review of Social Psychology*, 22(1), 164-214. doi: 10.1080/10463283.2011.627187
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72. doi: 10.1037/0033-2909.128.1.3
- Oyserman, D., Elmore, K., & Smith, G. (2012). Self, self-concept and identity. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 69-104). New York, NY: The Guilford Press.
- Oyserman, D., & Markus, H. (1998). Self as social representation. In U. Flick (Ed.), *The psychology of the social* (pp. 107-128). Cambridge, England: Cambridge University Press.
- Paranjpe, A., & Rao, K. R. (2008). Psychology in the Advaita Vendānta. In K. R. Rao, A. Paranjpe & A. K. Dalal (Eds.), *Handbook of Indian psychology* (pp. 253-285). New Dehli, India: Cambridge University Press.

- Poyrazli, S., & Grahame, K. M. (2007). Barriers to adjustment: Needs of international students within a semi-urban campus community. *Journal of Instructional Psychology, 34*(1), 28-45.
- Poyrazli, S., & Kavanaugh, P. R. (2006). Marital status, ethnicity, academic achievement, and adjustment strains: The case of graduate international students. *College Student Journal, 40*(4), 767-780.
- Poyrazli, S., & Lopez, M. D. (2007). An exploratory study of perceived discrimination and homesickness: A comparison of international students and American students. *Journal of Psychology, 141*(3), 263-280.
- Quinn, N., & Holland, D. (1987). Culture and cognition. In D. Holland & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 3-40). Cambridge, England: Cambridge University Press.
- Raman, P., & Harwood, J. (2008). Acculturation of Asian Indian sojourners in America: Application of the cultivation framework. *Southern Communication Journal, 73*(4), 295-311.
- Reddish, P., Bulbulia, J., & Fischer, R. (2014). Does synchrony promote generalized prosociality? *Religion, Brain and Behaviour, 4*(1), 3-19.
- Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum on the study of acculturation. *American Anthropologist, 38*, 149-152.
- Rice, K. G., Choi, C., Zhang, Y., Morero, Y. I., & Anderson, D. (2012). Self-critical perfectionism, acculturative stress, and depression among international students. *The Counseling Psychologist, 40*(4), 575-600.
- Roland, A. (1988). *In search of self in Japan and India Towards a cross-cultural psychology*. Princeton, NJ: Princeton University Press.
- Roos, S. M., Potgieter, J. C., & Temane, M. Q. (2013). Self-efficacy, collective efficacy and the psychological well-being of groups in transition. *Journal of Psychology in Africa, 23*(4), 561-567.
- Sandhu, D. S., & Asrabadi, B. R. (1994). Development of an acculturative stress scale for international students: Preliminary findings. *Psychological Reports, 75*(1, Pt 2), 435-448. doi: 10.2466/pr0.1994.75.1.435
- Sawrikar, P., & Hunt, C. (2005). The relationship between mental health, cultural identity and cultural values in non-English speaking background (NESB) Australian adolescents. *Behaviour Change, 22*, 97-113.
- Schachner, M., Robertson, T., Vijver, F. V. d., Funke, F., & Brzezinska, D. (2013). *Does tolerance reflect a more inclusive self-construal? A comparison of Poland, East and West Germany* Paper presented at the Steering the Cultural Dynamics: Selected papers from the 2010 Congress of the International Association for Cross-Cultural Psychology, Melbourne Australia.
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14*(4), 449-464. doi: 10.1016/0147-1767(90)90030-Z
- Shim, G., Freund, H., Stopsack, M., Kämmerer, A., & Barnow, S. (2014). Acculturation, self-construal, mental and physical health: An explorative study of East Asian students in Germany. *International Journal of Psychology, 49*(4), 295-303.
- Shweder, R. (1990). Cultural psychology - what is it? In J. Stigler, R. Shweder & G. Herdt (Eds.), *Cultural psychology: Essays on comparative human development* (pp. 1-43). Cambridge, England: Cambridge University Press.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin, 20*(5), 580-591. doi: 10.1177/0146167294205014
- Sinha, D. (1988a). Basic Indian values and behaviour dispositions in the context of national development: An appraisal. In D. Sinha & H. S. R. Kao (Eds.), *Social values and development: Asian perspectives* (pp. 31-55). Thousand Oaks, CA, US: Sage

- Sinha, D. (1988b). The family scenario in a developing country and its implications for mental health: The case of India. In P. R. Dasen, J. W. Berry & S. N (Eds.), *Health and cross-cultural psychology: Towards application* (pp. 48-70). Newbury Park, CA: Sage.
- Sinha, D., & Tripathi, R. C. (1994). Individualism in a collectivist culture: A case of coexistence of opposites. In U. Kim, H. C. Triandis, Ç. Kâğıtçıbaşı, S.-C. Choi & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 123-136). Thousand Oaks, CA: Sage
- Sinha, J. (1982). The Hindu (Indian) identity. *Dynamische Psychiatrie*, 15(3-4), 148-160.
- Sinha, J. (1988c). Reorganising values for development. In D. Sinha & H. Kao (Eds.), *Social values and development: Asian perspectives* (pp. 275-284). New Dehli, India: Sage.
- Sinha, J., Daftuar, C. N., Gupta, R. K., Mishra, R. C., Jayseetha, R., Jha, S. S., . . . Vijayakumar, V. S. R. (1994). Regional similarities and differences in people's beliefs, practices and preferences. *Psychology and Developing Societies*, 6(2), 131-150.
- Sinha, J., Sinha, T. N., Verma, J., & Sinha, R. B. N. (2001). Collectivism coexisting with individualism: An Indian scenario. *Asian Journal of Social Psychology*, 4(2), 133-145.
- Sinha, J., & Verma, J. (1994). Social support as a moderator of the relationship between allocentricism and psychological well-being. In U. Kim, H. Tiandis, C. Kagitcibasi, S-C. Choi & G. Yoon (Eds.), *Individualism and collectivism: Theory, method and applications* (pp. 267-275). Thousand Oaks, CA: Sage.
- Sinha, J., Vohra, N., Singhal, S., Sinha, R. B. N., & Ushashree, S. (2002). Normative predictions of collectivist-individualist intentions and behaviour of Indians. *International Journal of Psychology*, 37(5), 309-319.
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699-713. doi: 10.1016/j.ijintrel.2011.08.004
- Statistics New Zealand. (2014). *Asian ethnic group*. Retrieved from <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity/asian.aspx>
- Stets, J., & Burke, P. (2003). A sociological approach to self and identity. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 128-152). New York, NY: Guilford Press.
- Stoynoff, S. (1997). Factors associated with international students' academic achievement. *Journal of Instructional Psychology*, 24, 56-68.
- Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly*, 63(4), 284-297. doi: 10.2307/2695840
- Stuart, J., & Ward, C. (2011). Predictors of ethno-cultural identity conflict among South Asian immigrant youth in New Zealand. *Applied Developmental Science*, 15(3), 117-128.
- Swarbrick, N. (2012). *Te Ara - the Encyclopedia of New Zealand: Indians - Indian communities*. Retrieved from <http://www.TeAra.govt.nz/en/indians/page-1>
- Swarbrick, N. (2014). *Te Ara - the Encyclopedia of New Zealand: Indians - Facts and figures*. Retrieved from <http://www.TeAra.govt.nz/en/indians/page-7>
- Tabachnick, B. G., & Fidel, L. S. (2013). *Using multivariate statistics* (6th ed ed.). Boston, MA: Pearson Education.
- Tadmor, C. T., & Tetlock, P. E. (2006). Biculturalism: A model of the effects of second-culture exposure on acculturation and integrative complexity. *Journal of Cross-Cultural Psychology*, 37(2), 173-190. doi: 10.1177/0022022105284495
- Tajfel, H., & Turner, J. (2004). Social identity theory of intergroup behaviour. In J. Jost & J. Sidanius (Eds.), *Political psychology* (pp. 276-293). New York, NY: Psychology Press.
- Taylor, W. S. (1948). Basic personality in orthodox Hindu culture patterns. *The Journal of Abnormal and Social Psychology*, 43(1), 3-12.
- Tennant, R., Joseph, S., & Stewart-Brown, S. (2007). The Affectometer 2: A measure of positive mental health in UK populations. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation*, 16(4), 687-695.

- Thurber, C. A., & Walton, E. A. (2012). Homesickness and adjustment in university students. *Journal of American College Health, 60*(5), 415-419.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology, 60*(5), 649-655. doi: 10.1037/0022-3514.60.5.649
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506-520. doi: 10.1037/0033-295X.96.3.506
- Triandis, H. C. (1995). *Individualism & Collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. (1996). The psychological measurement of cultural syndromes. *American Psychologist, 51*(4), 407-415. doi: 10.1037/0003-066X.51.4.407
- Tripathi, S. R. (2005). Bases of social identity formation: An empirical exploration. *Psychological Studies, 50*(2-3), 150-155.
- Tuli, M. (2012). Beliefs on parenting and childhood in India. *Journal of Comparative Family Studies, 43*(1), 81-91.
- Tuli, M., & Chaudhary, N. (2010). Elective interdependence: Understanding individual agency and interpersonal relationships in Indian families. *Culture & Psychology, 16*(4), 477-496.
- Uskul, A. K., Hynie, M., & Lalonde, R. N. (2004). Interdependence as a mediator between culture and interpersonal closeness for Euro-Canadians and Turks. *Journal of Cross-Cultural Psychology, 35*(2), 174-191.
- Verkuyten, M., & Pouliasi, K. (2006). Biculturalism and group identification: The mediating role of identification in cultural frame switching. *Journal of Cross-Cultural Psychology, 37*(3), 312-326. doi: 10.1177/0022022106286926
- Verma, J. (1999). Collectivism in the cultural perspective: The Indian scene. In J.-C. Lasry, J. Adair & K. Dion (Eds.), *Latest contributions to cross-cultural psychology: Selected papers from the thirteenth international congress of the International Association for Cross-Cultural Psychology* (pp. 228-241). Lisse, Switzerland: Swet & Zeitlinger.
- Verma, J. (2001). Situational preference for different types of individualism-collectivism. *Psychology and Developing Societies, 13*, 221-241.
- Verma, J., & Triandis, H. C. (1999). The measurement of collectivism in India. In W. J. Lonner, D. L. Dinnel, D. K. Forgays & S. A. Hayes (Eds.), *Merging past, present, and future in cross-cultural psychology* (pp. 256-265). Lisse, Switzerland: Swets & Zeitlinger.
- Voronov, M., & Singer, J. A. (2002). The myth of individualism-collectivism: A critical review. *The Journal of Social Psychology, 142*(4), 461-480.
- Wang, C.-C., & Mallinckrodt, B. (2006). Acculturation, attachment, and psychosocial adjustment of Chinese/Taiwanese international students. *Journal of Counseling Psychology, 53*(3), 422-433.
- Ward, C., & Chang, W. C. (1997). 'Cultural fit': A new perspective on personality and sojourner adjustment. *International Journal of Intercultural Relations, 21*(4), 525-533. doi: 10.1016/S0147-1767(97)00023-0
- Ward, C., & Kennedy, A. (1992). Locus of control, mood disturbance, and social difficulty during cross-cultural transitions. *International Journal of Intercultural Relations, 16*(2), 175-194. doi: 10.1016/0147-1767(92)90017-0
- Ward, C., & Kennedy, A. (1993a). Psychological and socio-cultural adjustment during cross-cultural transitions: A comparison of secondary students overseas and at home. *International Journal of Psychology, 28*(2), 129-147. doi: 10.1080/00207599308247181
- Ward, C., & Kennedy, A. (1993b). Where's the 'culture' in cross-cultural transition? Comparative studies of sojourner adjustment. *Journal of Cross-Cultural Psychology, 24*(2), 221-249. doi: 10.1177/0022022193242006
- Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations, 18*(3), 329-343. doi: 10.1016/0147-1767(94)90036-1

- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23(4), 659-677. doi: 10.1016/S0147-1767(99)00014-0
- Ward, C., & Kus, L. (2012). Back to and beyond Berry's basics: The conceptualization, operationalization and classification of acculturation. *International Journal of Intercultural Relations*, 36(4), 472-485. doi: 10.1016/j.ijintrel.2012.02.002
- Ward, C., & Masgoret, A.-M. (2008). Attitudes toward immigrants, immigration, and multiculturalism in New Zealand: A social psychological analysis. *International Migration Review*, 42(1), 227-248.
- Ward, C., Okura, Y., Kennedy, A., & Kojima, T. (1998). The U-curve on trial: A longitudinal study of psychological and sociocultural adjustment during cross-cultural transition. *International Journal of Intercultural Relations*, 22(3), 277-291.
- Ward, C., & Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and sociocultural adjustment of sojourners. *International Journal of Intercultural Relations*, 15(2), 209-225. doi: 10.1016/0147-1767(91)90030-K
- Wei, M., Liao, K., Heppner, P., Chao, R., & Ku, T. (2012). Forbearance coping, identification with heritage culture, acculturative stress, and psychological distress among Chinese international students. *Journal of Counseling Psychology*, 59(1), 97-106. doi: 10.1037/a0025473
- Williams, C. T., & Johnson, L. R. (2011). Why can't we be friends?: Multicultural attitudes and friendships with international students. *International Journal of Intercultural Relations*, 35(1), 41-48.
- Wilson, J. (2013). *Exploring the past, present and future of cultural competency research: The revision and expansion of the sociocultural construct*. (Doctoral dissertation), Victoria University, Wellington, New Zealand.
- Yang, B., & Clum, G. A. (1995). Measures of life stress and social support specific to an Asian student population. *Journal of Psychopathology and Behavioral Assessment*, 17(1), 51-67. doi: 10.1007/BF02229203
- Yang, R., & Noels, K. A. (2013). The possible selves of international students and their cross-cultural adjustment in Canada. *International Journal of Psychology*, 48(3), 316-323. doi: 10.1080/00207594.2012.660161
- Yang, R., Noels, K. A., & Saumure, K. D. (2006). Multiple routes to cross-cultural adaptation for international students: Mapping the paths between self-construals, English language confidence, and adjustment. *International Journal of Intercultural Relations*, 30(4), 487-506. doi: 10.1016/j.ijintrel.2005.11.010
- Yeh, C., & Inose, M. (2002). Difficulties and coping strategies of Chinese, Japanese and Korean immigrant students. *Adolescence*, 37(145), 69-82.
- Yeh, C., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly*, 16(1), 15-28. doi: 10.1080/0951507031000114058
- Ying, Y. (2003). Academic achievement and quality of overseas study among Taiwanese students in the United States. *College Student Journal*, 37(3), 470.
- Yoon, E., & Lee, R. M. (2010). Importance of social connectedness as a moderator in Korean immigrants' subjective well-being. *Asian American Journal of Psychology*, 1(2), 93-105. doi: 10.1037/a0019964
- Yoon, E., Lee, R. M., & Goh, M. (2008). Acculturation, social connectedness, and subjective well-being. *Cultural Diversity and Ethnic Minority Psychology*, 14(3), 246-255. doi: 10.1037/1099-9809.14.3.246
- Yuki, M., Maddux, W. W., Brewer, M. B., & Takemura, K. (2005). Cross-cultural differences in relationship- and group-based trust. *Personality and Social Psychology Bulletin*, 31(1), 48-62.

- Zhang, J., & Goodson, P. (2011a). Acculturation and psychosocial adjustment of Chinese international students: Examining mediation and moderation effects. *International Journal of Intercultural Relations*, 35(5), 614-627.
- Zhang, J., & Goodson, P. (2011b). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35(2), 139-162. doi: 10.1016/j.ijintrel.2010.11.011
- Zheng, X., Sang, D., & Wang, L. (2004). Acculturation and subjective well-being of Chinese students in Australia. *Journal of Happiness Studies*, 5(1), 57-72.

Appendix A: Information Cover Sheet

Adjusting to Life and Academic Study in New Zealand

Namaste

Hello

Kia Ora

Welcome to this information page inviting participation in a research project looking at Asian Indian students studying in New Zealand.

My name is Mary Cooper and I am a Masters of Psychology student at Massey University undertaking a research project that aims to understand the experiences of international students adjusting to life and academic study in New Zealand.

Students who choose to study in a foreign country often face many challenges adjusting to a new culture and different academic styles. It is important that we understand how international students adjust to life in a new culture to ensure students are well supported to achieve positive outcomes from their educational programmes in New Zealand. Asian Indian students have been selected in this study as increasing numbers of students from India are choosing New Zealand as a destination for further study. Very little is known about the particular challenges faced by international students from India studying in New Zealand. This study hopes to address this situation.

You are invited to participate in this survey as your experience as an Indian international student studying in New Zealand is important. This is the first study to explore the influence of cultural adjustment of Indian students to life and academic study in New Zealand. Therefore, your responses to the survey questions are important in contributing towards improving our understanding.

If you decide to participate you will be asked to respond to a number of different questions in this online survey. There are five sections and the questions ask about:

- How you find life in New Zealand
- Your feelings over the past few weeks
- Your understanding of yourself and how you feel you relate to different groups in society
- Your skills and confidence with using English
- How well you feel you belong in your new community and your connections with others

The survey is completely voluntary. While I welcome and appreciate your participation, you are under no obligation to undertake this survey. Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question and may withdraw from the survey at any time before you click 'Send'.

The survey is anonymous and confidential. No personal information is being collected that could lead to the identity of any participant. All online data from this survey will be held in a secure database at Massey University and will only be accessed by myself and my Supervisor Dr Ross Flett, School of Psychology, Massey University. This database does not record email addresses of those responding to the survey.

It will take about 20 minutes to complete all the questions in this survey. There will no financial or academic reward or any effect on academic grades as a result of participation or non-participation in this survey.

If you decide to participate please click on the link at the end of this summary to begin the survey.

When completed, a summary of this study will be sent to the International Department at your campus and made available to all students through their international student bulletin board. Results of this study are also available through Massey University's School of Psychology website: <http://www.massey.ac.nz/massey/learning/departments/school-of-psychology/research/online-surveys-and-results.cfm>.

If you find undertaking this online survey distressing in any way, it may be helpful for you to talk to a friend, relative, or other support person (e.g. minister, counsellor, GP) about how you are feeling.

You can 'drop-in' or visit the on-campus student health centre where access to counselling support is provided.

You could also call, or check out the websites for the following support organizations who provide free support 24 hours a day, 7 days a week.

LifeLine: Free telephone counselling available 24 hours a day, 7 days a week

Ph: 0800 111 777

Website: <http://www.lifeline.org.nz>

Parent Help: Free telephone helpline available 24 hours a day, 7 days a week

Ph: 0800 568 856

Website: <http://www.parenthelp.org.nz/>

Parent to Parent: A coordinating agency who believe in the value of supporting parents.

Website: <http://www.parent2parent.org.nz/>

For further information about this survey you are welcome to contact either:

Myself:

Mary Cooper:

Email: mary.cooper.1@uni.massey.ac.nz

My Supervisor:

Associate Professor Ross Flett:

Email: R.A.Flett@massey.ac.nz

Phone: 0800627739 Ext: 85081

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/28. If you have any concerns about the conduct of this research, please contact Professor John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 81090, email humanethicsouthb@massey.ac.nz.

To participate in the survey, please click on this link: [Survey Questions](#)

Thank you for taking the time to consider participating in this study. Your contribution is important.

Mary Cooper

Appendix B: Survey Scales

A: - Sixfold Self-Construal Scale (Harb & Smith, 2008)

Instructions:

Below, you will find a series of questions that revolve around your perception of yourself. Each question is followed by a set of 6 possible categories:

- family,
- friends,
- social groupings,
- school/department peers,
- humanity in general
- personal self.

Social groupings could be any of the following: *political group/party, Governmental institution, or religious affiliation.*

You are asked to mark, from a low of 1 to a high of 7 the **frequency/magnitude** that most reflects your response to each question. . Please respond to each item within each question.

Thank you.

	Category	1	2	3	4	5	6	7
		To a very small extent	To a Small extent		To a moderate extent		To a large extent	To a very large extent
1	I think of myself as connected (linked) to :							
	My family							
	My friends							
	Students in my department/faculty							
	My social grouping							
	Humanity in general							
	Myself (I am a unique person separate from others)							
2	<i>I control my behaviour to accommodate the wishes (interests) of :</i>							
	My family							
	My friends							
	Students in my department/faculty							
	My social grouping							
	Humanity in general							
	Myself (I act as an independent person)							
3	<i>I am affected by events that concern (relate) to :</i>							
	My family							
	My friends							
	Students in my department/faculty							
	My social grouping							
	Humanity in general							
	Myself							

	Category	1	2	3	4	5	6	7
		To a very small extent	To a Small extent	To a moderate extent		To a large extent		To a very large extent
4	<i>I am aware of the needs, desires and goals of :</i>							
	My family							
	My friends							
	Students in my department/faculty							
	My social grouping							
	Humanity in general							
	Myself							
5	<i>I feel I have a strong relationship with :</i>							
	My family							
	My friends							
	Students in my department/faculty							
	My social grouping							
	Humanity in general							
	Myself (I am an independent person)							

Scale scoring: The relational sub-groups listed under the five questions form six sub-scales producing scores that, when compiled from each question and totalled for each sub-scale, describe a unique self-construal dimension. Four sub-scales produce four different configurations of interdependent self-construal:

- Family: vertical-relational interdependent self-construal
- Friends: horizontal-relational interdependent self-construal
- Students: horizontal-collective interdependent self-construal
- Social grouping: vertical-collective interdependent self-construal

Myself is the sub-scale that defines independent self-construal.

Humanity does not measure interpersonal relationships but assesses a sense of global connectedness.

B: - Revised Sociocultural Adaptation Scale (SCAS-R)
(Wilson, 2013)

Living in a different culture often involves learning new skills and behaviours. Thinking about life in New Zealand please rate your competence at each the following behaviours:

Please mark your selection on a scale of 1 (Not at all competent) to 5 (Extremely competent)

Thank you

	Category	1	2	3	4	5
		Not at all competent				Extremely competent
1	Building and maintaining relationships.					
2	Managing my academic/work responsibilities.					
3	Interacting at social events.					
4	Maintaining my hobbies and interests.					
5	Adapting to the noise level in my neighbourhood					
6	Accurately interpreting and responding to other people's gestures and facial expressions.					
7	Working effectively with other students/work colleagues.					
8	Working effectively with other students/work colleagues.					
9	Adapting to the population density.					
10	Understanding and speaking English.					
11	Varying the rate of my speaking in a culturally appropriate manner.					
12	Gaining feedback from other students/work colleagues to help improve my performance.					
13	Accurately interpreting and responding to other people's emotions.					
14	Attending or participating in community activities.					
15	Finding my way around.					
16	Interacting with members of the opposite sex.					
17	Expressing my ideas to other students/work colleagues in a culturally appropriate manner.					

	Category	1	2	3	4	5
		Not at all competent				Extremely competent
18	Dealing with the bureaucracy.					
19	Adapting to the pace of life.					
20	Reading and writing English.					
21	Changing my behaviour to suit social norms, rules, attitudes, beliefs, and customs.					

C: - Shortened Affectometer 2 Scale
(Kaummann & Ross, 1983)

These 10 questions ask you to respond to the following statement:

“Over the past few weeks I have had the feeling described by each item.”

To show how often you have had this feeling select **ONE** option for each item.

Thank you.

		Not at all	Occasionally	Some of the time	Often	All the time
1	Satisfied					
2	Optimistic					
3	Useful					
4	Confident					
5	Enthusiastic					
6	Hopeless					
7	Helpless					
8	Lonely					
9	Depressed					
10	Confused					

D: - Social Connectedness Scale-Revised
(Lee et al., 2001)

Directions:

Following are a number of statements that reflect various ways in which we view ourselves. Rate the degree to which you agree or disagree with each statement using the following scale (1 = Strongly Disagree and 6 = Strongly Agree). There is no right or wrong answer.

Thank you.

		Strongly Disagree	Disagree	Mildly Disagree	Mildly Agree	Agree	Strongly Agree
		1	2	3	4	5	6
1	I feel comfortable in the presence of strangers.....						
2	I am in tune with the world.....						
3	Even among my friends, there is no sense of brother/sisterhood.....						
4	I fit in well in new situations.....						
5	I feel close to people.....						
6	I feel disconnected from the world around me.....						
7	Even around people I know, I don't feel that I really belong.....						
8	I see people as friendly and approachable.....						
9	I feel like an outsider.....						
10	I feel understood by the people I know.....						
11	I feel distant from people.....						
12	I am able to relate to my peers.....						
13	I have little sense of togetherness with my peers.....						
14	I find myself actively involved in people's lives.....						
15	I catch myself losing a sense of connectedness with society.....						

16	I am able to connect with other people.....						
17	I see myself as a loner.....						
18	I don't feel related to most people.....						
19	My friends feel like family.....						
20	I don't feel I participate with anyone or any group.....						

E: - English Language Confidence Scale
(Clément & Baker, 2001)

Instructions:

Please rate how much you personally agree or disagree with these statement – show how much they reflect how you feel or think personally. Note, there is no right or wrong answer. All that is important is that you indicate your personal feelings.

Mark your response.

Thank you.

		Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1	I really believe that I am capable of reading and understanding most texts in English.						
2	In my opinion, I know enough English to be able to write comfortably.						
3	Personally, I believe that I know enough English to speak correctly.						
4	I am very confident in my ability to write English correctly.						
5	I feel that I can understand someone speaking English quite well.						
6	I believe that my knowledge of English allows me to cope with most situations where I have to use that language.						

F: - International Tests of English

Please record your latest score for one of the International test of English Language Test.

Please mark the test and your most recent score in each area:

IELTS	OET	TOEFL	Other Test:
• Reading		
• Writing		
• Listening		
• Speaking		

**G: - International English Language Tests System (IELTS) Scores
(IELTS, 2015)**

Band	Skill Level	Description
Band 9	Expert user	has fully operational command of the language: appropriate, accurate and fluent with complete understanding.
Band 8	Very good user	has fully operational command of the language with only occasional unsystematic inaccuracies and inappropriacies. Misunderstandings may occur in unfamiliar situations. Handles complex detailed argumentation well.
Band 7	Good user	has operational command of the language, though with occasional inaccuracies, inappropriacies and misunderstandings in some situations. Generally handles complex language well and understands detailed reasoning.
Band 6	Competent user	has generally effective command of the language despite some inaccuracies, inappropriacies and misunderstandings. Can use and understand fairly complex language, particularly in familiar situations.
Band 5	Modest user	has partial command of the language, coping with overall meaning in most situations, though is likely to make many mistakes. Should be able to handle basic communication in own field.
Band 4	Limited user	basic competence is limited to familiar situations. Has frequent problems in understanding and expression. Is not able to use complex language.
Band 3	Extremely limited user	conveys and understands only general meaning in very familiar situations. Frequent breakdowns in communication occur.
Band 2	Intermittent user	no real communication is possible except for the most basic information using isolated words or short formulae in familiar situations and to meet immediate needs. Has great difficulty understanding spoken and written English.
Band 1	Non-user	essentially has no ability to use the language beyond possibly a few isolated words.
Band 0	Did not attempt the test	No assessable information provided.