Making Sense of Cultural Complexity:
An Experimental Study of Third Culture Individuals’
Interpersonal Sensitivity as a Result of Intercultural Adaptation

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For David and Wilma Lyttle,
who along with immeasurable sacrifices,
planted the seed that led to this research
and have kept it alive ever since.
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“Coming together is a beginning. Keeping together is progress. Working together is success.” —Henry Ford

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Abstract

This study examined third culture individuals, defined as people who lived in a country other than that of their nationality during their developmental years, seeking to determine a difference in interpersonal sensitivity between third culture individuals and mono-cultured persons. While popular literature asserts such specialized skills developed as a result of intercultural adaptation, this assertion has not been empirically supported. Data was collected using web-based surveys, which yielded a sample size of 142. The instrument measured participants’ intercultural experience and interpersonal sensitivity in two classifications, emotional sensitivity and social sensitivity.

Results showed third culture individuals as having significantly higher social sensitivity than mono-cultured individuals; however, mono-cultured individuals’ self-reported aptitude for emotional sensitivity was significantly higher than that of the third culture sample. Additionally, no significant correlation was found between greater intercultural experience and heightened interpersonal sensitivity.

Key Terms: third culture individual, third culture, interpersonal sensitivity, intercultural communication, perception, social sensitivity, adaptation.
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Chapter One

Introduction

In a fast-paced, ever changing world of globalized commerce, the role of international relations has become increasingly important in order to maintain competitive and thriving markets for entrepreneurial economies. Stroh, Gregersen, Mendenhall, and Black (2004) examined an increase in international assignments for employees of Fortune 100 companies. The study shows that Gillette, an American corporation, employs 80 percent of its workforce for international assignment and that Phillip Morris employs 180,000 individuals to serve in such assignments across 200 countries (Stroh, et al., 2004, pp. 6-7). In addition to international trade, diplomacy, and military, various other occupations also require international work and cross-cultural exposure for expatriates. Statistical information from the Organization for Economic Co-operation and Development (OECD) shows that around 20 percent of Canada’s and 20 percent of Australia’s population is foreign-born. In addition, the resource shows that ten percent of the overall population in the United States, France, Greece, and Norway is foreign-born (Dumont & Lemaître, 2005).

The mentioned figures illustrate the growing trend of globalization. As a result of this increased tendency, many people have gained intercultural experiences, which affect individuals in diverse and complex ways. This study focuses on one such effect on an expatriate and his or her dependants’ international assignment: the development of specialized communication skills allowing the individual to function in the host culture. The term assigned to these people within this investigation is third culture individuals. Third culture individuals (TCIs), as studied in mainstream writing, are termed “third
“culture kids” and are referred to as such throughout popular literature, as it focuses primarily on the children of expatriate parents. Pollock and Van Reken (2001) defined a third culture kid as:

A person who has spent a significant part of his or her developmental years outside the parent’s culture [home culture]… [he/she] then builds relationships to all of the cultures [host cultures], while not having full ownership in any. Although elements from each culture are assimilated into [his/her] life experience, the sense of belonging is in relationship to others of similar backgrounds. (p. 19)

Within the phrase describing these intercultural individuals, the term, “third culture,” is mentioned. Useem, Useem and Donoghue (1963) described the “third culture” as a complex combination of an individual’s home culture and host culture (or host cultures), which amalgamated to form an individual third culture. The third culture is then reaffirmed and truly a “culture” when in association with other TCIs, who share similar backgrounds. Greater discussion and disagreement on the appropriateness of the “third culture” term will be discussed further in Chapter Two. Culture, however, has always been a difficult term to define; Kroeber and Kluckhohn (1952) discussed over 160 definitions of the term “culture.” The *Oxford English Dictionary* (2008) traces the etymology of the term back to fifteenth century when it was used to describe farmers tilling soil; however, this branched into many diverse uses of the term. The definition used for this research is culture as “collective phenomenon… something that is shared among people belonging to the same socially defined and recognized group” (Levine, Park & Kim, 2007, p. 207). These attributes can range from ideas, customs, social behavior, artifacts, or to the way of life of a particular people.
Reasoning for this study’s variation of the term from third culture kid to third culture individual is largely because the word “kids” categorizes these individuals as young; however, the definition is not limited to young people, nor does this research deal with children, but rather with these individuals as adults. According to the literature, there are variations within TCIs; these diversifications are based on the TCI’s levels of exposure to the host culture. TCIs come from a broad range of backgrounds, each exposing the individual to differing levels of cross-cultural exposure (Cockburn, 2002, p. 482). Families working in the military or government, as missionaries, and in business fields account for the vast majority of TCIs around the world. Unlike refugees and immigrants, TCIs do not plan on staying in the host culture or settling there, but rather intend to return to the countries of their passports in the future. Anticipating this prospect, the TCI cannot disassociate himself or herself from the respective home culture, nor does he or she desire to reject the host culture, as this results in an increased marginalization. Although not TCIs, refugees and immigrants who had to leave their home culture under duress, may have similar emotions and adaptation experiences, which has been studied by Steyn and Grant (2007).

Exposure and adjustment to diverse cultures have many effects on an individual making him/her culturally complex. This presupposition forms the foundation of this study, which aims to empirically examine the difference between TCIs and individuals who lived in one culture throughout their developmental life (mono-cultured individuals), specifically examining differences in interpersonal sensitivity by monitoring emotional and social comprehension. Variations within the TCI group will also be monitored to
examine whether greater cross-cultural experience leads to interpersonal sensitivity aptitude.

Differences in TCIs’ backgrounds can significantly influence their cross-cultural exposure; however, they remain TCIs if “they have spent a significant part of [their] developmental life outside their [home culture]” (Pollock & Van Reken, 2001). Exact ages of contact with host culture is not outlined in the authors’ definition; however, they mention the experience must occur “during years when that child’s sense of identity, relationships with others, and view of the world are being formed in the most basic ways” (p. 27). For the purposes of this study TCIs are defined as individuals who experienced host culture exposure during middle childhood and/or early adolescence. Psychology theorists Erikson and Piaget discussed middle childhood (ages 6-12) as the stage in which children learn the fundamental skills, such as forming a rudimentary identity, grasping interpersonal dependence, and learning the abilities their culture deems important (Newman & Newman, 2003, p. 254; Dacey & Travers, 2002, p. 246). Early adolescence (ages 12-18) is a period of meta-development, which includes a greater awakening of individual identity, comprehension of social norms and subgroups, in addition to increased cognitive complexity (Newman & Newman, 2003, p. 290; Dacey & Travers, 2002, p. 313). While this study cannot address these developmental processes extensively, these ages are considered necessary parameters of a TCI’s intercultural exposure and enculturation (which will be discussed further in Chapter Two).

In addition to the aforementioned requirement, the research will ascribe a necessary length of intercultural contact within each period of development. Since an individual establishes only basic (cultural) attributes during middle childhood, the
requirement will be three years of experience in a host culture, in order to be considered a TCI. Conversely, the early adolescent experiences rapid maturing and therefore will only need one year of intercultural exposure during this phase to qualify as a TCI. Pollock and Van Reken (2001) recognized these differences saying, “living overseas between the ages of one and four will affect a child differently than if that same experiences occurs between the ages of eleven and fourteen” (p. 27). Although qualifications for an individual’s extent of intercultural contact is not explicitly outlined, the variance is recognized by intercultural scholars.

Peters (1989) summarized Van Reken’s three categories of TCIs’ dependence on their host cultures and assessed that their willingness to adapt more to their host culture will affect the degree to which they adjust to that culture (p. 278). A determining factor that dictates the exposure to the host culture is often seen in the occupation of the parent. Ender (1996) quoted government research, which depicts life on an international U.S. military base:

As these Americans have been transported, so have their institutions, their culture, and many of their material accouterments. With such social and economic self-sufficiency, ethnic communal enclaves have developed within the foreign milieus. And the everyday routine of American children going to American schools, American fathers going to American jobs, American mothers shopping at American stores goes on in places as distant as Tokyo and Heidelberg, Izmir and Naha, Reykjavik and Manila. Like small alien islands in seas of foreign culture these communities tenaciously maintain their distinctive way of life. (p. 126)
This military lifestyle, with limited cross-cultural contact, stands in stark contrast to that of the TCI whose parents are missionaries; however, both are still considered TCIs. Van Reken (1996) described some attributes of the missionary kid’s intercultural experience:

[Each] religious community has its creed, doctrines, and principles by which its members are to live, all clearly laid out. “Thou shalt…” “Thou shalt not…” All behavior is measure according to those tenants of faith. Therein lies one of the major reasons for the experience of religious culture shock when MKs return to their home countries. Even shared core values will be lived out differently from one culture to another. (p. 86)

Although exposure to the host culture and the occupation of the guardian have their role to play in the impact and formation of the TCI, the individual is classified as a TCI regardless of amount of direct cross-cultural exposure. McCaig (1996) mentioned that this is ultimately because the TCIs’ developmental context differs largely from that of his or her guardian’s.

An important aspect of “building relationships with culture,” as mentioned in Pollock and Van Reken’s (2001) definition, is adapting to the intercultural setting through the use of one’s perceptions. This literature addresses the process of developing perceptual skills. Pollock (1989) stated:

Third-culture kid[s]…tend to be excellent observers. You learn how to be an observer when you move from place to place and decide that it’s not particularly smart to put your foot in your mouth on the first encounter with a new group of people so you stand on the edge and observe. (p. 247)
Pollock’s stance adopts the idea that perception is learned through trial and error and TCIs refine that ability in the process. McCaig (1996) took a more serious position: “They have spent years developing [social] skills as strategies for social survival in times of transition. Without them, they would be unable to gain social entry into international or host culture” (p. 100). McCaig’s (1996) work interpreted perception as a necessary ability for social survival, which leads to adaptation to the host culture. Schaetti (1996) assessed perception as not only a necessary step in viewing cross-cultural differences, but also required to interpret differences between juxtaposed cultures by “form[ing] clear boundaries in the face of multiple cultural perspectives” (p. 180).

When adaptation is addressed within the TCI literature, it reflects the prerequisite of strong perceptive ability. Eidse and Sichel (2004) stated that adaptation among TCIs comes when, “children learn who they are by ‘testing and measuring’ themselves against friends over many years” (p. 81). Smith (1996) proposed that “[a]daptation—especially through proficiency in the host-country language—brings with it greater acceptance of those cultures. This might begin with cuisine, ways of observing holidays…and eventually lead to more fundamental values” (p. 196). Knell (2006), quoted an anonymous TCI who disclosed, “I am the one who wears a thousand masks, one for each day and time. I am the one who learned to be all I’m expected to be, but is still not sure of who I really am” (p. 82). This stance on adaptation would imply a superficial change, rather than a holistic adaptation, but would still imply strong perceptual ability. Eidse and Sichel (2004) agree with this statement saying, “[TCIs] deal with transition by managing superficial changes with ease, seemingly conforming to the new host culture, but camouflaging their inner lives” (p. 179).
This ability to adapt oneself according to perceived cultural norms is also addressed within third culture literature. Some benefits and detriments of this ability will be briefly overviewed; however, this study cannot focus on each facet of these issues, but will address adaptation further in Chapter Two. One positive result of strong or heightened perceptual ability is an intercultural communication skill set, as described by McCaig (1996):

In an era when global vision is an imperative, when skills in intercultural communication, linguistic ability, mediation, diplomacy and the management of diversity are critical, global nomads are better equipped in these areas by the age of eighteen than are many adults. (p. 100)

This opinion was echoed by Knell (2006): “Third-culture kids have an enormous range of skills and experiences to draw on as [they] enter the world of study and employment” (p. 142). Popular literature also addresses the third culture individuals’ flexibility in social situations, as a benefit of intercultural exposure (Useem & Cottrell, 1996, p. 35). In addition to these claims, TCIs are described as having an increased level of maturity (Pollock, 1989, p. 247) and “a great sense of inner confidence and strong feelings of self-reliance” (Pollock & Van Reken, 2001, p. 112).

There are also detriments to this perceptual ability in social adjustment. Schaetti (1996) stated that marginality is a negative result of this experience: “Cultural marginality describes an experience…[where] people do not tend to fit perfectly into any one of the cultures in which they have lived, but may fit comfortably on the edge, in the margins of each” (p. 178). This “marginality” can lead to what the popular texts describe as “rootlessness,” which is the feeling of having no particular place to settle down.
(Pollock, 1989, p. 250). This, in turn, may cause TCIs to experience a “restless migratory instinct” (Pollock & Van Reken 2001, p. 125) or reculturation difficulties upon returning to one’s home culture (Eakin, 1996, p. 62).

It is in these positive and negative ramifications of intercultural experience that the TCI is best understood. Pollock and Van Reken’s (2001) definition stated, “[T]he sense of belonging is in relationship to others of similar backgrounds.” For this reason, the word “culture” is assigned to these individuals who share similar experiences. Seaman (1996) summarized the perspective of TCI literature best when stating, “Our family, our homeland is in the company of others with similar experience. Our heritage was not formed by a national tradition but by a particular situation” (p. 54).

Popular literature on third culture individuals describes them as people who experience cross-cultural exposure during their developmental years. The various works state that exposure initiates an adaptation process that relies on heightened perceptions in the context of intercultural communication, which result in benefits and detriments that forms a shared complex cultural experience for these individuals at large. Throughout this work, the postulation that TCIs have a heightened perceptual ability will be referred to as the lay theory of TCI, as these claims have not previously been empirically tested.

This study seeks to investigate the stance taken by the popular literature on TCIs by comparing it to scholarly literature dealing with a similar subject matter (Chapter Two). Thereafter, this researcher will test the lay theory projected within the popular texts through an experimental assessment of TCIs (Chapter Three). The results of this analysis (Chapter Four) and the interpretations (Chapter Five) will either lend support or negate the stance taken by popular literature on the perceptual abilities of TCIs.
Chapter Two

_Literature Review_

This study falls within the arena of intercultural communication, thus a brief overview of this area will be necessary to establish the context. En route to examining intercultural communication specifically, it is important to define the term “culture.” The term “culture” is interpreted in many different ways; perhaps this reflects its popularity and use as a “buzz-word” in recent generations. For the purposes of this study, the term will adopt its definition from within the framework of intercultural communication. However, even within this specific discipline, the word has developed over the years and holds many different definitions. Obviously, this is not an etymological study of “culture,” nor does it seek to grapple with the spectrum of definitions reachable.

*Intercultural Communication*

Jandt (2004) assessed that culture must have three parts. First, culture reflects a group of individuals whose population is “self-sustaining,” meaning they can independently produce another generation without reliance upon another group. There would be distinct difficulties in determining a clear cultural boundary should the blending of cultures be necessary. Another facet is described as “the totality of that group’s thought, experiences, and patterns of behavior, its concepts, values, and assumptions about life that guide behavior and how those evolve with contact with other cultures” (p. 7). The final component of the definition states that these values are transmitted from generation to generation through upbringing, education, and tradition. Useem, Useem, and Donoghue (1963) corroborated these final two facets by defining culture as “the learned and shared behavior of a community of interacting human beings” (p. 196).
An important part of a person is his or her cultural identity. Casmir (1984), building on Samovar and Porter’s definition of cultural identity as “the image of the self and the culture intertwined in the individual’s total conception of reality,” went on to stress that the “process of becoming man takes place in an interrelationship with a [perceived] environment” (Casmir, 1984, p. 2). This identity is formed through an understanding of the culture’s symbols, meanings, and code of conduct, as well as perceiving acceptance within this framework (Collier & Thomas, 1988). In essence, “culture” is not just surrounding an individual, but also determines who the individual will become. Through interpersonal relationships and affirmation from within one’s culture, one forms his or her self-perception. A brief overview and background of culture is necessary to provide a glimpse of the power one’s culture has over an individual; however, this extensive field of study cannot be exhaustively assessed in this review, rather presenting the context of intercultural communication and its complexity is intended.

Asuncion-Lande (1990) defined intercultural communication as the “process of symbolic interaction involving individuals or groups who possess recognized cultural differences in perception and behavior that will significantly affect the manner, the form, and the outcome of the encounter” (p. 211). In order to facilitate intercultural communication, the blending of the before-mentioned cultural identities is necessary. Possible blocks to establishing effective intercultural communication could be stereotypes, dissimilarities, anxiety, and insufficient cultural understanding (Jandt, 2004, p. 96).
Establishing relationships within one’s culture (intracultural communication) requires communication, which involves the simultaneous encoding and decoding of messages by participating parties. Intercultural communication functions similarly, only it lies within a broader field of experience or context. Sarbaugh (1979) commented on this subject stating, “[As] one begins to identify the variables that operate in the communication being studied, however, it becomes apparent that they are the same for both intercultural and intracultural settings” (p. 5). Sobre-Denton and Hart (2008) examined intercultural communication strategies of sojourners and found that practices used for adapting to the new cultures are similar to those used when adjusting to new environments within one’s home culture. Research shows that intercultural relationships can be equally as strong and can endure as long as intracultural relationships (Lee, 2006, p. 6). This is not stating that they are equally easy to establish or initiate, but rather, once they have been created, can be sustaining interpersonal relationships. In fact, Lee (2006) argued that the challenges of an intracultural relationship (within the same culture) are just as prevalent within the intercultural setting, but additionally there are differences in culture, dialectics, and potential language barriers (p. 5). Intercultural relationships encounter an adaptive experience that fosters understanding between those interacting. Forgas (1981) suggested, “Societies produce their own interpretations and representations of events, their own theories and explanations, which are the building blocks of individual cognitive activity” (p. 54). These “building blocks” differ between cultures and require active cognition from the parties involved to transactionally interpret them correctly.
Matsumoto, Yoo, and La Roux (2007) stated, “Intercultural experience is comprised of continuous adaptation and adjustments to the differences with which we engage each day” (p. 5) Adaptation, as studied by intercultural scholar Young Kim (2002), is described as the “process by which individuals upon relocating into an unfamiliar cultural environment, establish (or reestablish) and maintain a relatively stable, reciprocal, and functional relationship with the environment” (p. 260). Arno Haslberger (2005), a researcher in this particular field, explained, “Cross-cultural adaptation is a complex process in which a person becomes capable of functioning effectively in a culture other than the one he or she was originally socialized in” (p. 85). Arasaratnam and Doerfel (2005) assert that motivation and knowledge of the culture are essential for competent intercultural communication. This ability allows the visitor a capability to adjust and also gives him/her a greater understanding of the host culture that the individual is surrounded by. Haslberger further elucidated, “As people become immersed in foreign cultures their whole being gets affected” (p. 86). When discussing an individual’s adjustment to another culture, the terms acculturation and deculturation are employed. Before defining these terms one must take a step back and examine the foundation.

As stated earlier, cultural identity is a large portion of one’s self-concept; the development of these interrelated parts begins at a young age and develops throughout maturity, known as enculturation. There is no specific point of enculturation, but rather it is a continuously affirmed process forming “individuals into recognizable members of a given cultural community” (Kim, 2002, p. 261). Individuals who have experienced enculturation within one culture and are then exposed to another culture must undergo
adjustment to communicate effectively within this new environment. *Deculturation* is the process by which one’s initial cultural identity (the one that is encultured) is unlearned or adjusted to adopt new cultural norms (Bar-Yosef, 1968). This can take on many different forms within the individual, but unlearned social norms often are just replaced by new cultural responses and are thereby lost in the process (Kim, 1988). The opposite response is *acculturation*, which is the “process of learning and acquiring the elements of a host culture” (Kim, 1988, p. 51; Shibutani & Kwan, 1965). Again, acculturation can take on various forms, but ultimately will differ from one’s initial cultural norms and responses. Kim (1977) stated that “immigrants and aliens in foreign countries who participated in networks of the host country will be more likely to become acculturated than immigrants who are involved only in immigrant communication networks” (p.70). Recently, Kim (2008) proposed that an individual who experiences frequent acculturation and deculturation to many cultures undergoes an “intercultural evolution,” which instills within that person a unique global understanding that grants him or her a “universalized” perspective (p. 366-367).

The point where acculturation and deculturation are both at their peak is considered *assimilation*. Kim (2002) states that assimilation is not a process, but rather it is the theoretical state where the process ends, where the interplay of acculturation and deculturation have both subsided to reveal a final state of equilibrium. Assimilation is not void of the initial enculturation; rather, it is an amalgamation of both old and new, as a result of cultural adaptation and adjustment. This symbiotic result is made through exposure to the host culture and is fine-tuned through communication and interpersonal relationships within that culture. This review will return to how this process is carried
out, but first will look at one group of individuals who actively participate in intercultural communication.

The “Third Culture” Individual

After the review of some popular literature on third culture individuals (TCIs) in the introduction, an examination of scholarly works associated with the area of research is appropriate. As mentioned in the introduction, TCIs are people who experience “behavioral patterns created, learned, and shared by the members of different societies who are personally involved in relating their societies, or sections thereof, to each other” (Useem, Useem & Donahue 1963, p. 169). John and Ruth Useem, who are the original and preeminent scholars in this arena, coined and defined the term “third culture.” In other words, the TCI must acclimate to a new culture; his or her adaptation results in a cultural blend of his or her own home culture and host culture, which creates a “third culture.” Useem et al., (1963) go on to state,

They are men in the middle, not just individuals from different societies, relating themselves personally to each other, but representatives from different societies relating their societies, or at least segments thereof, to each other by way of their interpersonal relationships. (p. 172)

This “third culture” is built upon experience, education, and communication, which form cognitive structures and patterns that are created and shared (Useem & Useem, 1967). Cockburn (2002) reaffirms this and also the need for TCIs to be flexible and adaptive in order to deal with the many transitions they experience. Gilbert (2008) studied TCIs and found grief over the loss of security, trust, and identity a common trait among these individuals, based on the turbulence of transitions. This common trait is
perhaps a side effect of the experience, but was common to each surveyed TCI. Useem et al. (1963) further elaborated the idea of a third culture, explaining:

As men continue to associate across societies while engaged in common enterprises, they incorporate into the ethos of their ingroup, standards for interpersonal behavior, work-related norms, codes of reciprocity, styles of life, networks of communication, institutional arrangements, world view, and on the individual level, new types of selves. (p.170)

Useem and Useem (1967) therefore saw the TCI’s “new form of self” as a culture, not his or her own unique culture, but a culture that is unique to all TCIs. Useem et al. (1963) used a metaphor of a bridge to describe TCIs, which was similarly used by Martin and Nakyama (2007) to explain cross-cultural identity. Useem et al. (1963) assessed that TCIs connect two societies through pathways that link separate cultures; as a result, all TCIs share the similar culture of blending cultures (or building bridges). Assimilation, for a TCI, is unique. The TCI acculturates to his or her host or culture, while simultaneously resisting the deculturation process that would cause him or her to lose or unlearn his or her home culture. Since the TCI will eventually return to his or her home culture, considerable decultuation would not be advantageous. As a result, complete assimilation is not the goal for TCIs.

Useem and Useem (1967) noted that there are four different levels of intercultural adaptation among TCIs. These categories reflect a similar model of adaptation by Berry, Kim, and Boski (1988), which is more clearly established. They found that there are four categories of sojourners identified through “Yes” or “No” answers to two questions. The first question asks the traveler if it is important to maintain home-cultural identity. The
second question asks the traveler if he or she values and wants to maintain friendships with individuals from his or her host culture. There are four possible results to the two “Yes” or “No” questions: (1) An integrator is the individual who says “Yes” to both questions and therefore tries to blend both cultures; (2) A marginalizer answers “No” to both questions and shows that he does not want to be associated with either his home or host culture; (3) A separator would answer “Yes” to the first question regarding his home culture, but have no interest in establishing a relationship within his host culture; (4) Finally, assimilators would answer “No” to the first question, willingly downplaying or avoiding his own culture, while embracing his or her host culture. The prime example of a TCI, would be the individual whose self-reported attitude labeled him or her as an integrator, as this describes an individual willing to adapt to a new culture, while unwilling to dismiss their native background and culture. Berry (2008) asserted that integration or separation is the most likely response that occurs in cross-cultural exposure. Although attitude variance does not change the TCI’s classification, which is based on intercultural exposure rather than attitude towards the culture exposed to, it may illustrate differences in a TCI’s level of adaptation. Depending on which category the TCI is placed in, it may affect his or her intercultural adaptation and as a result his or her third culture. Cox (2004) examined the process of repatriation of sojourners and found attitude toward integration in the host culture played a large role in an individual’s readjusting to his or her own culture (pp. 215-216).

Useem and Useem’s (1967) portrayal has been criticized by scholars, most notably by Fred Casmir (1993) who stated, “What they called ‘third cultures,’ [resulted from] poorly understood interactions between sojourners and members of their host
cultures…” (p. 417). Casmir (1978) investigated and developed Useem and Useem’s (1967) idea of a “third culture” to include a different definition, calling it “third culture building.” Casmir (1999) defined it as “the construction of a mutually beneficial interactive environment in which individuals from two different cultures can function in a way beneficial to all involved” (p. 92). In other words, the individual in a host culture will interact with somebody from within that culture and the two will create a “third culture” through their dyadic communication. This idea stands in contrast to Useem and Useem’s definition of “third culture,” which relied only upon the sojourner to adjust his or her cultural communication with that of the host culture. Casmir (1993) argued that communication is a two-way process and as a result, both parties involved in the intercultural communication are interpreting, creating, decoding and sharing meaning. With respect to Useem and Useem’s work, Casmir did see necessary elements of the communication model within their depiction. Casmir’s (1993) model claims that “social acts are simultaneously commands and results, causes and effects,” and therefore require, “more than one partner’s adaptation, adjustment, awareness to produce effective communication” (p. 415).

The idea that two individuals can create and hold their own “culture” seems to refute the previously mentioned definition of culture. The requisite for a culture to be self-sustaining would mean that a “personal culture” would likewise have to recreate itself; this is obviously not possible in this model. Baxter (1987) argued that relationships are a culture because “it is a system of meanings created and maintained by its parties,” which create a “mini-culture” reliant upon norms (p. 262). He portrayed shared stories, ritual reenactments, symbols and words, places, actions, and cultural
artifacts as part of culture. Taking these as representations of unique cultures, the author then discussed their role in interpersonal relationships. Swenson and Casmir’s (1998) study aimed to show that intercultural communication at large was based on the interaction of individuals and not on the interaction of cultures and the results strengthened this stance (p. 223). It is arguable whether the term “culture” should be used for Casmir or Useem and Useem’s ideas. Intercultural scholars can be found on both sides of the discussion; however, this study focuses on intercultural interaction specifically, not on refining terminology used.

There are distinct differences between the concepts of “third culture individuals” and “third culture building.” These have been clearly stated in this study and are understood. For the purpose of this study, we are aiming to seek differences in perceptual ability based on adaptation resulting from intercultural communication. Therefore, this study will look at third-cultured individuals for two reasons. The first reason is because TCIs fall into both stances on intercultural communication. Obviously, TCIs fit Useem’s description of intercultural communicators, as they are seen as the individuals adapting to their host culture. But TCIs also fit into Casmir’s definition of third culture building, because they are part of the process in establishing intercultural communication, although they do not complete the model single-handedly. The second reason this study will focus on TCIs, rather than just individuals who have had cross-cultural experiences, is because it investigates whether one’s middle childhood and early adolescent development within a host culture, which TCIs have experienced, is associated with increased interpersonal sensitivity. Throughout the remainder of this study, third culture individuals will be the objects of examination, due to their increased exposure and adjustment to intercultural
communication at a critical age; however, the principles from the third culture-building model still apply to these individuals.

Perception

According to Masumoto et al. (2007), “Fostering positive intercultural adjustment requires the development of effective intercultural communication competence.” Intercultural communication competence is defined by Wiseman (2002) as the “knowledge, motivation, and skill [necessary] to interact effectively and appropriately with members of different cultures” (p. 208). Matsumoto et al. (2007) referred to intercultural communication similarly, defining it as “the skills, talents, and strategies in which we engage in order to exchange thoughts, feelings, attitudes, and beliefs among people of different cultural backgrounds.” These definitions both refer to “skill” as a necessity in intercultural communication competence. Wiseman (2002) stressed, “Intercultural communication competence is not something innate within us nor does it occur accidentally” (p. 211). Spitzberg (2000) expanded this statement by saying that skills must be replicable, otherwise they are merely a lucky response. Also skill must be goal-oriented, serving a personal, social, or contextual ends, or it is simply behavior.

In pursuit of understanding this skill, Koester, Wiseman, and Sanders (1993) found “it is a social judgment, which requires an evaluation by one’s relational partner of one’s communication performance” (p. 7). This means not only focusing on one’s own needs, but also fulfilling the expectations normal to that context, also known as “optimizing” communication (Wiseman 2002, p. 210). The importance of context is mentioned in the research of Dinges and Lieberman (1989), which concluded, that intercultural communication competence requires more than just culture-specific
understanding, but also emphasizes the importance of context in which actions take place. These studies show that intercultural communication skill involves judgment of the individual as well as judgment of the context from which the communication arises; both emphasize the need for accuracy in judgment. This accuracy relies on perception. Martin and Hammer (1989) argued that scholars base “intercultural communication competence on perceptions of individuals [who are] ‘grounded in perceptions of everyday communication’” (p. 305). In summary, this research shows that intercultural adjustment relies largely on communication competence, which rests on the foundation of accurate perceptions of the context and communicators involved. While one’s motivation to adjust, as well as knowledge of the host culture, will affect the acculturation process of the sojourner as well, this study seeks to determine interpersonal sensitivity resulting from intercultural adaptation and therefore deals specifically with the perceptual skills developed.

The literature concerning cognitive perception is rich. This study is not designed to investigate all aspects of perception, but in an attempt to frame perception within communication, it will provide an overview of some of this literature. Merleau-Ponty (1962) stated, “All knowledge takes its place within the horizons opened up by perceptions (p. 207). Carlson (1961) defined perception as “the analytical process by which the individual quantitatively and qualitatively interprets reality” (qtd. in Casmir, 1984, p. 5). This reality is not only formed from perceptions of unfolding events, but gleans from past experiences (Casmir, 1984, p. 4), one’s self-perception (Mead, 1938), as well as one’s ability to process data (Schroeder, 1967, p. 129). Casmir (1984) reported
that ultimately perception “forms the basis for all behavior,” and therefore is the raison d’être for communication (p. 5).

As stated earlier, perceptions form reality, but the challenge for the communicator is to find reality in his or her perceptions. Perception gives one understanding of a stimulus. This process involves two steps; first, assigning meaning to stimuli and secondly, seeking closure by placing it within an understood pattern. This process ultimately forms one’s knowledge of perceived stimuli. Interpersonal communication involves stimuli in verbal and nonverbal forms. There are the words being said, connotations the words evoke, how the words are being said, and the nonverbal signs associated with the conversation, the context and the environment within which the conversation falls (Schroeder, 1995). Decoding and encoding messages rely on accurate perceptions and have a direct correlation to communication competence. Schroeder (1995) conducted a study, which revealed “. . . shy and socially anxious [individuals] have difficulty in decoding nonverbal information, leading to poorer social information processing skills” (p. 957).

Nonverbal cues are a large part of communication, but accurate perception hinges on more than nonverbal messages. Lopes, Salovey, Cote, and Beers (2005) studied the role of perception within emotion regulation. The study states, “The ability to perceive and understand emotions influences social interaction more . . . by helping people interpret internal and social cues and thereby guiding emotional self-regulation and social behavior” (p. 113). Accurate perceptions enable individuals to monitor emotions, social cues, and behavioral norms and allows the communicator to respond appropriately.
Matsumoto, LeRoux, Bernhard, and Gray (2004) also emphasized the importance of emotion regulation and perceptual flexibility for intercultural adjustment.

This study deals with perception within the intercultural context. As stated earlier, intercultural relationships share the same difficulties as intracultural (within one culture) relationships, and this remains true with perception as well. However, intercultural communication has an added barrier of perceived cultural differences. Perceived cultural differences (PCD) are “diversity in features, illustrated by differences in worldview, values, thought process, customs, appearance, expectations, communication style, verbal behavior, and non-verbal behavior” (Dodd, 1998, p. 5). The PCD can polarize individuals from differing cultures if one allows stereotypes or “pictures in our heads” to hamper communication (Gudykunst & Kim, 2003, p. 127). Stereotypes are not necessarily wrong; they allow for classification of cultures, but when an attitude of differentiating “us” from everyone else is created, it results in a dysfunctional ethnocentric view of culture (Gudykunst & Kim, 2003, p. 139).

An alternative reaction to PCD is a heightened cultural consciousness or mindfulness (Dodd, 1998). This employs uncertainty reduction principles. Marris (1996) suggested, “The way we understand the world, our purpose in it, and our power to control our daily destiny leads us to uncertainties” (p. 18). Similarly, Chang (2009) portrays mental tensions, derived from cultural differences, as the essence of schema adjustment, which is necessary for adaptation (p. 9). Like stereotypes, uncertainty plays a valuable role in all interpersonal relationships; however, it is only once that uncertainty begins to reduce that a relationship can begin. Cultural consciousness employs openness to another
culture, willingness to change perspective, and a readiness to alter one’s “categorization” of individuals (Langer, 1989).

The literature reveals that in the realm of intercultural communication, the role of perception is critical. Casmir (1984) argued that “intercultural communication relies heavily on the displays available to any person involved in the interaction process” (p. 6). Barnlund’s (1974) study also stated, “Effective dialogue between such contrasting cultures results from the ability to get in touch with each other, by learning to know and feel what others know and feel.” The literature on perception seems to indicate that a heightened perception is necessary in intercultural communication. One study found that the participants who often travel outside their own country were better receivers of nonverbal cues (Swenson & Casmir, 1998). The research has illustrated that adaptation resulting from intercultural communication rests heavily on perceptive ability and correct responses to these perceptions. Another term that encapsulates this aptitude is interpersonal sensitivity, of which perception is a crucial part (Horgan & Smith, 2006, p. 127).

**Interpersonal Sensitivity**

Interpersonal sensitivity is defined broadly as “the ability to sense, perceive accurately and respond appropriately to one’s personal, interpersonal, and social environment” (Bernieri, 2001, p. 3). Bernieri (2001) also stated that “interpersonal sensitivity starts with perception” and is understood in terms of “accuracy of perception” (pp. 3, 10). When discussing communication in particular, Riggio and Riggio (2001) found that “Interpersonal sensitivity is a broad construct, encompassing accuracy in decoding emotions, cognition, personalities and social relationships” (p. 136).
following definition encompasses the role of perception well, prompting an appropriate response (which is the other part of interpersonal sensitivity): “Encoding skill, expressive control, and interpersonal influence are relevant to the broad topics of emotional intelligence and social skill; their treatment is beyond the psychological construct” (Bernieri, 2001). Cognitive perception is largely psychological, but in interpersonal sensitivity what fuels perception and the outcomes of them is communication. Interpersonal sensitivity will be broken down into two constructs, namely emotional sensitivity and social sensitivity, according to Riggio and Riggio’s (2001) recommendation. This will also corroborate with the methodology used in this study, which reflects that of Carney and Harrigan (2003).

Emotional sensitivity is “the ability to accurately assess nonverbal cues associated with emotion” (Carney & Harrigan, 2003). Hall, Murphy and Mast (2006) argued that “accuracy of interpreting the meaning of nonverbal cues or ‘inferential accuracy’ is the standard operational definition of interpersonal sensitivity” (p. 141). Nonverbal messages can serve many functions in interactions, which carry over to intercultural communication. Ekman and Friesen (1969) outlined five functions of nonverbal signs. First, they may repeat a message, or conversely, the nonverbal may contradict the verbal message. Thirdly, it can replace a verbal message and nonverbal cues can complement verbal messages that were sent. Finally, nonverbal messages can accent a part or multiple portions of the verbal message for emphasis or to regulate the message. The role of emotional sensitivity is to perceive the various nonverbal signs and interpret them accurately based on the context, and assess the underlying emotions of the communicator.
Nonverbal expressions vary between cultures. According to Swenson and Casmir (1998), “as cultural similarities decrease, accuracy in decoding nonverbal expression of emotion also decrease” (p. 216). There are obvious universal nonverbal expressions, such as smiling, pain, anger, etc., which have been thoroughly studied for over a century (Darwin, 1872). However, emotional sensitivity and perception are truly put to test when less obvious, culture-specific nonverbal expressions are employed (Ekman, Friesen, O’Sullivan, Chan, Diacoyanni-Tarlatzis, Heider et al., 1987). Nonverbal messages can be “both reactive and intentional...it is important to study both their biological and cultural origins” and they are important as they “draw us closer to what is safe and away from what is dangerous” (Swenson & Casmir, 1998).

Social sensitivity is “concerned with the more global social information including (but not limited to) emotion, personality, and social role” (Carney & Harrigan, 2003). Lopes et al., (2005) discussed this sensitivity to be “influenced by many factors including social skills, personality traits, motivation and person-environment fit” (p. 116). This element of interpersonal sensitivity requires “attention to and an awareness of others’ social behavior, an ability to ‘read’ social situations, as well as the ability to judge others feeling, cognitions and personalities” (Riggio & Riggio, 2001).

It is apparent that emotional and social sensitivity are interrelated. Ambady, Hallahan, and Rosenthal’s (1995) study on emotional sensitivity and accuracy in judgment showed that “individuals who perform well on nonverbal sensitivity seem to pick up well on social cues” (p. 519). Perceiving emotional cues is seen as “crucial in forming relationships” in Swenson and Casmir’s (1998) study (p. 214). An individual, who has been exposed to intercultural adaptation, must employ emotional sensitivity in
order to perceive and respond to nonverbal cues appropriately. Swenson and Casmir (1998) stated, “Humans look to faces of others to help them interpret feelings and tailor interpersonal interactions more effectively” (p. 215). In intercultural settings, the communicator is in greater need to adapt or “tailor” his or her message; therefore, based on this criterion, to assume a heightened perception is not illogical.

Keltner and Haidt (2001) suggested, “Emotions serve communicative and social functions conveying information about people’s thoughts and intentions, and coordinating social encounters.” This ability is not a natural talent, but rather is a learned skill. Swenson and Casmir (1998) found that the increase in age, languages known, and education received (as well as cross-cultural occupations held) was correlated with an increase in an individual’s social sensitivity. Matsumoto et al. (2007) stated, “Emotions, therefore, are central to this process, and hold the key to successful or non-successful intercultural experiences” (p. 7). Yoo, Matsumoto, and LeRoux (2006) stressed the necessity of emotion recognition and regulation in intercultural adjustment. Emotions represent complexity not only in physical appearance, but in social, biological, and cognitive factors (Swenson & Casmir, 1998). The sojourner must therefore nurture an ability to perceive and infer accurately in order to acculturate to his or her host culture.

Empathy is also closely correlated to interpersonal sensitivity, but the two do not always go hand in hand (Carney & Harrigan, 2003). Losoya and Eisenberry (2001) explained, “Empathy has long been thought to contribute to individuals abilities to understand, predict, experience and relate to others’ behaviors, feelings, attitudes, and intentions (p. 21). This definition shows its distinct similarities with social sensitivity, in particular. Throughout recent years, social sensitivity scholars have studied empathy and
its correlation with perceptual accuracy. It has also been described by Ickes (2001) as “everyday mind reading used to infer others’ thoughts and feelings” (p. 232). This ability reflects an aspect of interpersonal sensitivity and particularly social competence.

Empathy also “emphasizes the vicarious emotional reactions that occur within the individual as a result of observing another’s emotional state or situation” (Losoya & Eisenberry, 2001, p. 22). The interpersonally sensitive individual may be empathetic; however, one can be interpersonally sensitive and not empathize with another individual, inasmuch as he or she does not become affected by another’s emotion, but simply comprehends it (Losoya & Eisenberry, 2001, p. 21). Jackson (2008) discussed intercultural sensitivity and the ability for a sojourner to empathize with his or her host culture, and found that research participants inflated their own perception of intercultural empathy, while possessing similar sensitivity to non-sojourning individuals. Assessment may find individuals with heightened empathy who may receive high scores on interpersonal sensitivity; however, examining a symbiotic relationship between empathy and interpersonal sensitivity is not within the ramifications of this study.

Relationship building, as described by Vogt and Colvin (2003) relies largely on the individuals involved. The study shows, “Interpersonally-oriented people are more attuned to others than those who are less invested in interpersonal relationships” (p. 287). This could imply that the developed skill of interpersonal sensitivity may have incorporated a natural aspect as well as the before-mentioned environmental formation. The study also states, “Some individuals are more highly motivated to develop and maintain positive interpersonal relationships than others” (p. 268). Colvin and Bundick (2001) predicted that individual variation should be expected within the intercultural
experiences; however, generally the intercultural experiences will develop specialized skills.

This chapter has sought to review literature on intercultural communication, in particular emphasizing the role of adaptation to a host culture. One way this study sought to examine adaptation was through its overview of “third culture individuals” and their third culture-building process. As part of this process, intercultural communication competence requires accurate perceptive abilities in order to acculturate to a host culture. The concept of adaptation, which requires keen perceptual ability and appropriate responses from perceptions gained, led the researcher to provide an overview and define interpersonal sensitivity, which summarizes the interwoven faculty of strong perceptual skills and proper social response. This progression of this literature leads to the crux of the study, namely the experimental examination of a potential correlation between TCIs’ intercultural adaptation and interpersonal sensitivity. The lay theory implied by popular texts in the field of third culture kids, has never been studied quantitatively; therefore, this research aims to test a possible difference between TCIs and mono-cultured individuals through statistical analysis of information gathered. Procedure for this assessment will be examined in the following chapter.
Chapter Three

Methodology

The first chapter of this study discussed a lay theory articulated in various popular works that alluded to noticeable differences in social interaction of third culture individuals (TCIs). This was followed, in Chapter Two, by a more in-depth investigation of scholarly literature that relates to this topic. Amidst this study’s academic survey, no literature has been found that reported interpersonal sensitivity among TCIs, nor has any literature been found to discredit such an investigation. As stated already, this research is an experimental study of interpersonal sensitivity, comparing differences in individuals' “ability to make correct judgment about abilities, traits and states of others from nonverbal cues” (Carney & Harrigan, 2003, p. 194). TCIs are exposed to socially adaptive lifestyles as a result of intercultural communication experiences. This study thus tests interpersonal sensitivity, due to its close relationship with (and prerequisite to) intercultural communication competence within adaptive social functioning.

Based on the literature found on third culture individuals, this study aims to corroborate claims that TCIs have greater interpersonal sensitivity than their mono-cultured counterparts. In addition, the study seeks to examine the extent of cross-cultural exposure and adaptation among the TCIs, to test whether there is a corresponding increase in interpersonal sensitivity. This study aims to test two hypotheses:

(H₁) Third culture individuals possess greater interpersonal sensitivity than mono-cultured individuals, as a result of their cross-cultural adaptation.

(H₂) Increased experience with intercultural adaptation will result in an increased interpersonal sensitivity among third culture individuals.
Overview of Research Method

As stated in the literature review, interpersonal sensitivity may be divided into two categories, social sensitivity and emotional sensitivity; this follows Riggio’s (1986) social skills inventory. Rather than attempting to develop an original, yet credible, method to investigate third culture individuals’ interpersonal sensitivity in social interaction, this study utilized a reliable and established instrument. Carney and Harrigan (2003) researched the area of social sensitivity in order to establish a correlation between an individual with interpersonal sensitivity being drawn to others with high interpersonal sensitivity. The current research did not seek to build on their hypothesis, but rather recycled their method of monitoring social and emotional sensitivity in order to draw conclusions about third culture individuals’ and mono-cultured individuals’ perceptive ability.

In pursuit of measuring a difference in TCIs’ and mono-cultured individuals’ (MCIs) interpersonal sensitivity, the researcher analyzed subjects that fit into these two categories. The subjects participating in this experiment had to meet the qualifications necessary to be labeled a “TCI” or a “MCI.” Third culture individual participants had to have spent a significant portion of their developmental life (between the years of 6-18) outside their home country as outlined in the introduction. The individual had to have intercultural (host country) experience for a minimum of three years during his or her middle childhood development (age 6-12), or one year within early adolescence (age 13-18), or half of each requirement if the individual’s experience spans both phases. Conversely, the MCI participants, in order to avoid interaction effect caused by variations in culture, must have spent all of their lives in their home cultures and countries (allowing
for vacations, or short term trips of no more than two months, etc.). Contrasting the differing developmental backgrounds is the only way of establishing an accurate separation and thereby testing the first hypothesis.

In order to complete this experiment as accurately as possible, the researcher surveyed a broad range of subjects. A web-based survey allowed the research to be manageable and yet flexible enough to accommodate the participation of a broad range of individuals. Each participant completed an intercultural experience survey, then embarked on two self-reports on interpersonal sensitivity (one emotional, one social), and two practically-based forms of analyzing social and emotional sensitivity respectively. The reason the researcher used multiple instruments was to maximize congruence in data analyzed.

Self-reports have been criticized within the field of interpersonal sensitivity research as being subjective to one’s self-perception and response biases. Hall et al. (2006) holds the opinion that self-reports are not valid as “people have poor insight into their own nonverbal decoding skills” (p. 143). However, Riggio and Riggio (2001) examined such stances and showed that the self-perception of nonverbal accuracy portrayed “largely positive correlations” to the performance-based examinations of nonverbal accuracies (p. 138). The study concludes that there is credible merit to using self-reports in interpersonal research and they also have many positive attributes including low cost. However, taking into consideration the doubts of other scholars, this study aimed to reinforce self-reports with performance-based assessments.

The third culture individuals participating in this research were located by using contact information from the alumni center at an international high school in Vienna,
Austria as well as through the international student center at a large liberal arts university in Virginia. In addition to these resources, the researcher contacted members of large third culture individual social networking websites (TCKResearch.com, TCKid.com, Third Culture Kids Everywhere on Facebook.com) to take part in the study. Also, a leading researcher in the area of TCI, Ruth Van Reken, contacted TCIs to participate in the research. In addition, subjects were asked to invite other individuals to participate, thus creating a snowball sample. Many participants were recruited from within the United States of America through a large liberal arts university in Virginia. The participants asked to cooperate in this research venture voluntarily contributed their feedback. They were asked to allow 20-30 minutes for the assessment. Some participants were offered extra credit in various courses for taking part in the study.

Intending to gain the broadest range of participants possible, all research instruments were made interactive and available on the Internet. Participants undertook the survey from various locations, including Thailand, France, Sweden, Australia, Germany, Philippines, Venezuela, and others. A website was created, allowing participants to log in globally (AllynLyttle.com). Upon entering the website each individual created a unique and anonymous user name, under which his or her survey scores were saved. The web-based surveys were available online from February 5, 2009 to February 21, 2009, in an attempt to attain the largest number of viable subjects possible.

Upon completion of the surveys and experiments conducted, the researcher was able to draw comparisons from the two sample groups. All participants involved in this research remained anonymous and were assigned a label and classified as a TCI or MCI
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by the researcher, depending on the information gleaned from the intercultural experience survey. The total number of participants was 198; however, 56 were discarded because these were in complete or did not meet the qualifications set on participants, resulting in a usable sample consisting of 74 TCI and 68 MCI subjects.

Research Instruments

Intercultural Experience Survey. Each individual taking part in the research was be asked to complete an intercultural experience survey (included in the Appendix). The survey asked demographic questions such as gender, nationality, residence, and home culture. This survey served as a way to differentiate between TCIs and MCIs, in addition to revealing characteristics about the participants’ intercultural experiences. The subjects were asked questions revealing their level of intercultural exposure, such as languages known, years spent outside home culture, and number of countries in which they lived. Two open-ended questions required individualized answers: “Years spent outside home country, at which age?” and “Number of countries (excluding home country) lived in for over 6 months during those years?” One question was listed and ranked “Languages known?” required the participant to enter the applicable information, which is followed by a question of “Proficiency of these languages?” ranked on a 5-point scale. This question was to assess a possible facet of the subject’s intercultural optimizing (as discussed in Chapter Two). Differentiation between immigrants and refugees and TCIs were determined by a simple “Yes” or “No” question, which asked, “Are you an immigrant or refugee to country of your nationality?” All immigrant and refugee participant surveys had to be removed as they did not qualify as TCIs, nor were they truly mono-cultured. Finally, the TCI participants answered two “Yes” or “No” questions from
the aforementioned discussion by Berry, Kim, and Boski (1988) on intercultural adaptation. As mentioned in the literature review, these questions classify individuals into four categories (separator, marginalizer, integrator, assimilator) and in this study served to rate the TCI's self-reported adaptation attitude.

The intercultural experience survey gave relevant background information for interpreting the information gained from the following surveys and performance-based assessments. It was also used to rate the level of intercultural experience with intercultural adaptation.

**Self-reported Emotional Sensitivity Survey.** The Perceived Decoding Ability Scale (Form 2, in Appendix), developed in Carney and Harrigan’s (2003) study, was used with permission by Dana Carney in measuring the participants’ perception of their ability to determine emotions from non-verbal facial expressions and verbal cues. The questions required the participant to analyze themselves and answer questions like “I can usually tell when someone is angry from that person’s facial expressions,” on a 7-point Likert scale from 1 (not at all like me) to 7 (exactly like me). The data gathered from this 16-question survey tested the emotional sensitivity that each subject believes he or she possesses. This survey was re-created for the website using PHP-based survey script.

**Practical Emotional Sensitivity Experiment.** This experiment, also used in the earlier referenced study, known as the Diagnostic Analyses of Nonverbal Accuracy (Nowicki 1994), guides the subject through a performance-based analysis of their emotional sensitivity. This instrument was used for the current research with permission from Steve Nowicki. The tool required participants to look at 24 pictures, each for two seconds. Each picture showed a face in a different emotional state; the subject then
selected a descriptive word that best fits (happy, sad, angry, or fearful). The number of correct descriptions denoted the empirical score for the experiment. The DANVA was adapted for the website by placing the facial depictions into a Flash animation. The graphics allowed the participant a three-second count down before revealing the image for two seconds and then requiring a response before moving to the next image.

*Self-reported Social Sensitivity Survey.* Carney and Harrigan’s (2003) used a list of characteristics describing social sensitivity, which required the subject to analyze himself or herself on a 7-point Likert scale according to 16 descriptions (Form 3, in the Appendix). The descriptions involved statements, such as “I display awareness to world around me.” Each subject then rated himself or herself somewhere on a scale from 1 (not like me at all) to 7 (exactly like me). The findings from this test showed how the participant views his or her own social sensitivity. This survey was re-created for the website using PHP-based survey script and was also used by permission from Dana Carney.

*Practical Social Sensitivity Survey.* The “Missing Cartoons Test,” also incorporated in Carney and Harrigan’s (2003) interpersonal sensitivity research, was used to test how sensitive subjects were toward interpreting social situations. This was assessed through decoding the correct social activity present in a cartoon strip (deMille, O’Sullivan, & Guilford, 1965). Each question in the exercise involved a sequence of four cartoon segments; however, one picture was missing from each strip and had to be added by the subject to complete a coherent social situation within of the comic strip. The correct segment had to be found amidst three false segments, found below the cartoon strip. Participants must have followed socially sensitive hints in the three established
segments in order to select the appropriate image, which had been omitted from the sequence. The number of correct comic sets generated the score of accuracy for the participant’s social sensitivity. The comic strips were placed on the website by using PHP-based survey script, which accompanied the images. An example was explained to each participant before they began the survey. Each strip in the survey loaded individually and required selection before moving to the next cartoon strip. Its co-creator, Maureen O’Sullivan, granted permission of the use of this instrument.

**Analysis**

The findings from these two short surveys and two practical experiments were divided into two categories, social sensitivity and emotional sensitivity of each participant. These two facets make up the larger category of interpersonal sensitivity, but deal with different aspects of the subject (Carney & Harrigan, 2003, p. 194). The data was used in order to draw conclusions from the similarities or differences seen in TCIs and MCIs. The intercultural experience survey allowed for easy categorization of subjects as MCIs or TCIs, assign levels of intercultural experience, as well as permitting deeper scrutiny of the findings (such as gender difference, etc.) which were put to use for developing further studies in this same area.

This data was statistically analyzed using SPSS (*Statistical Package for the Social Sciences*) Version 17. Initially, the researcher examined the data using t-tests, ANOVA, and Pearson correlations to assess statistical significance. TCI and MCI were considered the independent variable while subjects’ interpersonal sensitivity (IPS) scores were the dependent variables.
The directional research hypothesis (H₁) of TCIs’ versus MCIs’ mean IPS scores was tested using an analysis of variance (t-tests). The analysis was conducted using the mean IPS score. Additionally, the mean emotional sensitivity scores and social sensitivity scores were tested for significant probability. Finally, each individual instrument was tested to reveal significant statistical differences were evident between TCI or MCI participants. As participants came from across the globe, inherent cultural bias was examined by testing participants’ scores based on their nationalities.

Finally, the gender of the participants was examined to seek if gender affects interpersonal sensitivity. The researcher conducted a two-way ANOVA to assess the main effects between MCIs’ and TCIs’ gender differences. These were examined within the TCI and MCI interpersonal sensitivity scores. The researcher conducted a two-way ANOVA comparing mean scores of male TCIs, female TCIs, male MCIs, and female MCIs.

Thereafter, the second directional research hypothesis (H₂) was tested by using a correlation matrix. TCIs’ self-reported data in the intercultural experience survey were assigned numeric values according to the question. Each country the TCI subjects listed as having lived in was assigned two points and the years in which they lived there were correspondingly allotted one point each (example: two countries for two years each would yield eight points). Likewise, each language known by the subject was rewarded points according to the 5-point ranking of fluency (example: two languages known fluently and one language intermediate, would yield thirteen points, five for each fluent language and three for the intermediate). Developmental years spent outside one’s home country were also assigned one point per year. Finally, for the two TCI attitude questions,
which resulted from the “Yes” and “No” answers to two questions (discussed in Chapter Two), numeric values were assigned to each label based on the amount of cultural adaptation the individual sought; integrators received the most points, six, as they sought to adjust to the host culture and maintain home culture traits; assimilators received four points as they wished to adapt to their host culture, but not maintain home culture traits; marginalizers received two points, as they wished to hold on to their home culture while resisting host environment adaptation; and finally separators received no points as they did not seek to adapt or maintain cultural norms. The values of the subjects’ self-reported answers from the intercultural experience data were summed up, giving each TCI a score. Thereafter, this was correlated to the interpersonal sensitivity scores gained from the remaining instruments. This was done to determine whether a correlation exists between intercultural adaptation and interpersonal sensitivity.

The second research hypothesis (H₂) was also examined using analyses of variance, which assessed specific variances within the TCI sample. First, the TCI sample was divided into four groups depending on the participants’ attitude, to see if significant relationships exist between attitude and IPS (or the instruments used to test IPS). In addition, each IPS instrument was correlated with languages known and fluency therein to test for a direct correlation to IPS (and its constituent instrument). This was done by attributing numeric figures to the ranked fluency of each language (each language known based on a 5-point scale). Similar correlations were examined using years in host country, number of countries lived in for more than six months, and dissimilarity between subjects’ reports of nationality and home culture. Analyzing the intercultural experience survey as different independent variables allowed for examination of a possible
correlation between a specific ingredient of adaptation (years outside home country, attitude, language fluency, etc.) and interpersonal sensitivity, as this instrument was developed by the researcher and its reliability had not been previously established. The results from the research outlined and explained in this chapter are reported in the following chapter and the ramifications thereof will be discussed greater detail in Chapter Five.
Chapter Four

Results

The variables examined in the current study were participants’ self-reported and performance-based emotional and social sensitivity scores. As stated in the methodology, data was collected through web-based surveys and then statistically analyzed to test two hypotheses. Ultimately, 142 participants’ surveys and reported data could be utilized for statistical analysis. In this chapter both hypotheses are restated and the concurring results of the statistical analysis reported.

Hypothesis One

Examination of interpersonal sensitivity among third culture individuals (TCIs) and mono-cultured individuals (MCIs) respectively, was the foremost objective of the current investigation. Testing lay theories, which projected a higher social and emotional sensitivity among TCIs than among MCIs, this study predicted:

\( (H_1) \) Third culture individuals possess greater interpersonal sensitivity than mono-cultured individuals, as a result of their cross-cultural adaptation.

Testing this hypothesis was done by analyzing data collected from the aforementioned interpersonal sensitivity surveys and experiments. The participant’s interpersonal sensitivity was assessed in terms of their emotional sensitivity and social sensitivity, which each had a self-report and a performance-based facet (missing cartoons test for social sensitivity and the DANVA for emotional sensitivity). To test for differences between the two groups, \( t \)-tests were employed.

Dividing interpersonal sensitivity into two component measures revealed noteworthy findings, as illustrated in table 1. The results of each instrument used will be
reported for the sake of clarity. The instruments used to measure for social sensitivity where the missing cartoons strips test and a self-report of social aptitude. The missing cartoon strips test, yielded significantly higher scores among TCIs \((t (140) = 4.661, p < .001)\), as did the self-report \((t (140) = 2.381, p < .01)\). Emotional sensitivity was measured by using the Diagnostic Analysis for Non-verbal Accuracy (DANVA) and a self-report of emotional aptitude. The \(t\)-test revealed no significant difference in the DANVA scores \((t (140) = 1.127, p = .26)\). However, the emotional sensitivity self-report illustrated a significant result in favor of the MCIs \((t (140) = -2.134, p = .035)\), which was not expected.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>TCI</th>
<th>MCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sensitivity</td>
<td>Cartoon Strip</td>
<td>S.S. Self-report</td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>Danva</td>
<td>16.39***</td>
<td>12.60</td>
</tr>
<tr>
<td>Emotional Sensitivity</td>
<td>Danva</td>
<td>E.S. Self-report</td>
</tr>
<tr>
<td>N</td>
<td>19.86</td>
<td>19.35</td>
</tr>
<tr>
<td>Danva</td>
<td>91.59**</td>
<td>87.21</td>
</tr>
<tr>
<td>E.S. Self-report</td>
<td>89.74</td>
<td>93.71*</td>
</tr>
</tbody>
</table>

Statistical significance determined by a \(t\)-test.  
* \( p < .05 \)  
** \( p < .01 \)  
*** \( p < .001 \)  

Due to many participants in the survey coming from multi-cultural backgrounds, a series of \(t\)-tests were conducted comparing the interpersonal sensitivity scores among participants from various cultures, in order to test for a possible cultural bias. All participants were divided into two groups by nationality (“United States” and “Other”) and were compared. The results revealed slightly higher means on all instruments for the “Other” group; however, the only statistically significant results were seen on the social sensitivity self-report \((t (140) = 2.552 p < .001)\). These tests imply that the research tools used were not culturally biased, at least not in favor of American culture, where the tests were developed.
As mentioned in Chapter Three, many studies examine the differences between gender on interpersonal sensitivity, but this study did not examine this exhaustively; rather, this research sought to investigate whether gender played a role in the results found. A two-way ANOVA revealed significant interaction between TCI/MCI gender variable on interpersonal sensitivity, as seen in Figure 1; therefore, all constituent parts were analyzed for significance.

Figure 1. Interaction plot for gender and TCI/MCI on IPS.

Upon completion of the analysis, no significant main effects for gender or TCI/MCI were found. This interaction was examined using t-tests comparing the four constituent survey scores for males and females, respectively within each cultural grouping. The mean scores are displayed in table 2. Female TCIs rated themselves higher on emotional sensitivity self-reported scores than their male TCI counterparts rated themselves \((t(71) = -2.523, p < .01)\). Conversely, male MCIs self-reported higher social sensitivity that their female counterparts rated themselves \((t(58.7) = 2.86, p < .01)\), while female MCI’s did significantly better than males in the DANVA, the practical assessment...
for emotional sensitivity, \( t(67) = -2.684, p < .01 \). These tests explain the significant interaction found in the ANOVA.

Table 2

<table>
<thead>
<tr>
<th>Gender</th>
<th>TCI</th>
<th>Social Sensitivity</th>
<th>Emotional Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cartoon Strip</td>
<td>S.S. Self-report</td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>16.96</td>
<td>88.62</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>16.29</td>
<td>92.82</td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
<td>13.26</td>
<td>91.42**</td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>11.95</td>
<td>84.18</td>
</tr>
</tbody>
</table>

Statistical significance determined by \( t \)-test

\* \( p < .05 \)  \quad \*\* \( p < .01 \)  \quad \*\*\* \( p < .001 \)

Hypothesis one was thus partially supported, as the results thus show a significant statistical difference between the social sensitivity of the TCI and that of the MCI through the instruments used to measure social sensitivity. However, as stated above, MCI participants believed themselves to have higher emotional sensitivity than their TCI counterparts. Cultural bias of the tests was examined by testing the participants’ nationalities and their scores. This revealed only one significant result that did not suggest any bias toward American participants. Although gender and cultural classification (TCI/MCI) generated significant interaction effects with IPS scores, there were no significant main effects of genders on any of the measures.

**Hypothesis Two**

The second hypothesis predicted that increased intercultural exposure and adaptation would result in increased interpersonal sensitivity. The second hypothesis is based largely on this logic, which was supported by literature:

\( (H_2) \) Increased experience with intercultural adaptation will result in an increased interpersonal sensitivity among third culture individuals.
Testing this hypothesis was done in various ways. Primarily, Pearson’s Product Moment correlations were used to correlate each TCI’s intercultural experience score, which were calculated based on their self-reported intercultural experiences (languages known, years outside home country, attitude toward home country, etc.), with their specific IPS scores. Subsequently, each component of the intercultural experience score was correlated with the research instruments employed. Each instrument that made up the interpersonal sensitivity score (both self-reports and both performance-based experiments) was correlated with the intercultural experience score, yielding no significant correlations on any part.

Since the researcher prescribed the values assigned to each part of the intercultural experience score (explained at length in Chapter Three); to test its validity, each component of the survey was correlated individually with the IPS scores to see if there was any relationship present between any of the variables. The number of languages known was examined first, which showed no significant correlations with any of the scores. Years spent outside the home country were correlated next, revealing only a weak, but significant correlation with the self-report of social sensitivity ($r (73) = .23$, $p < .05$). Number of countries lived in for more than six months was also correlated but revealed no significant correlations with any of the IPS scores. The attitude held by individuals in regard to intercultural adaptation, which resulted in four subgroups (separator, marginalizer, integrator, assimilator), was tested using ANOVA. The differences were not statistically significant among the four classifications of attitude.

Additionally, this hypothesis was tested comparing TCIs who reported a differing home culture from their nationality with those who did not. Mainly this was done to
examine whether completely assimilated TCIs had higher IPS scores than those who held to their national culture. Each instrument’s scores were tested revealing no significant statistical difference between those whose home culture differed from nationality and those TCIs whose culture and nationality aligned.

Hypothesis two was thus not supported, which seems to indicate that increased intercultural experience does not cause increased interpersonal sensitivity. Upon breaking down the intercultural score into its constituent parts and correlating them with the IPS scores the findings still revealed virtually no significant statistical correlation at any level, also refuting the postulation.
Chapter Five

Discussion

The primary examination of this study focused on evaluating third culture individuals (TCIs), defined as persons who experience development outside their home country, and mono-cultured individuals (MCIs) to test for differences in their interpersonal sensitivity (IPS). The data was collected from 142 participants who completed a series of web-based surveys, which were then analyzed to test two hypotheses.

While the examination of overall IPS scores did not reveal significant findings, by using Riggio and Riggio’s (2001) recommendation of breaking down IPS into social and emotional sensitivity, differences were evident between the TCI and MCI samples. TCIs performed higher on the missing cartoons test measuring social aptitude and reported higher social sensitivity on the survey, while MCI participants self-reported a higher emotional sensitivity, but did not perform better on the practical test for emotional sensitivity. These results indicate notable differences between these two groups. First, the data points toward TCIs as having significantly higher social sensitivity than the MCI participants, as both the practical assessment and the self-reported social sensitivity revealed a concurrent difference. Secondly, it shows that MCIs believe themselves to be more astute toward emotional cues than TCIs predict themselves to be; however, the MCIs’ prediction does not match the results of their practical assessment, on which the TCIs actually had a higher average score than MCIs, although the difference was not statistically significant.
Results showing heightened social sensitivity within the TCI group supports the first hypothesis, outlined throughout this study, which is an assessment of a lay theory of TCIs articulated in popular and professional literature. Although, TCIs did not receive significantly higher overall IPS scores (which included emotional sensitivity), in consideration of the research tools used and the literature presented, the results support the lay theory being examined. Researchers studying TCIs have developed the argument, although largely based on anecdotal evidence, that TCIs, having experienced high intercultural exposure, hold notable intercultural competence. This competence stems form a high perceptual ability as a result of adaptation to diverse cultures. Pollock (1989) ascribed heightened social observation skills to TCIs, developed as a result of adjusting to differing social settings. McCaig (1996) argued that these perceptive socialization abilities are survival skills, necessary for adjustment. Refinement of these skills was furthermore discussed by Schaetti (1996), who suggested that TCI’s perceptual ability allows him or her clarity in determining differences between cultural norms. Reasoning for the accentuated ability in TCIs is attributed, by Eidse and Sichel (2004), to comparisons throughout childhood to others in search of normalcy.

Interpersonal sensitivity, which Bernieri (2001) defined as an “ability to sense, perceive accurately and respond appropriately to one’s personal, interpersonal, and social environment,” was an appropriate measuring scale as it summed up the conceptualized TCI theory. The two subcategories of IPS, emotional and social sensitivity, which specifically measured emotional non-verbal comprehension and social competence, created an organized framework assessing two aspects of IPS. Each category included one self-report of the respective sensitivity and one performance-based test for each
discipline, which measured the participant’s ability in a practical fashion. As each category had two scales, it allowed for greater accuracy in assessment of individuals’ interpersonal sensitivity. The results of the current study sheds light on many aspects of these popular conjectures using the IPS scales by Riggio and Riggio (2001).

Intercultural experience is the key differentiator between the two groups compared in this research. Wiseman (2002) discussed intercultural competence resulting from intercultural experiences as a learned skill, which is acquired through careful practice, stressing that it is not an innate quality within an individual. This capability results from repeated effective interaction with individuals from differing cultures (Barnlund 1974; Spitzberg, 2000). The noteworthy distinction seen between the TCI and MCI groups’ results alone, connote that there is a pronounced variation between each participant set. In line with the theories presented by TCI researchers, the argument is made that the difference lies in perceptual ability (Eidse & Sichel, 2004). Martin and Hammer (1989) and Masumoto et al. (2007) underscore this perceptual talent as the basis for intercultural competency. Perception describes the process by which an individual interprets knowledge, environment, and reality (Carlson, 1961; Merleau-Ponty, 1962; Casmir, 1984); therefore, it affects many aspects of an individual.

Interpersonal sensitivity, examined in this research, is based largely on perception and accuracy in perceptual ability (Bernieri, 2001; Hall et al., 2006). The first part of IPS, social sensitivity, measures the “ability to ‘read’ social situations, as well as the ability to judge others feeling, cognitions and personalities” (Riggio & Riggio, 2001). TCIs, who have likely been exposed to varying social settings throughout much of their developmental life, would arguably sharpen their skills in judgment of social situations in
order to make more appropriate assessments of the differing social situations in which they find themselves. The results of this study suggest that TCIs view themselves as having higher social comprehension abilities than MCI participants felt about themselves; this confidence would be present in the TCI as a result of successful social interaction in a multitude of locations and culturally diverse situations. Additionally, the practical assessment paralleled the TCI’s observations, adding credence to their self-assurance.

The practical assessment required particular attention to the context of the environment, in order to correctly identify the missing portion. Dinger and Lieberman (1989) and Wiseman (2002) express the importance of context comprehension in order to effectively utilize interpersonal sensitivity, more specifically social sensitivity. Keen perception of situational context in the cartoon strip would reveal the appropriate missing cartoon from the options presented; IPS score was thus determined by the number of correctly matching cartoons strips.

Conversely, neither TCIs nor MCIs performed significantly higher in emotional sensitivity scoring, which monitored accuracy in “assess[ing] nonverbal cues associated with emotion” (Carney & Harrigan, 2003). From the IPS literature, reviewed in Chapter Two, it is clear that emotional and social sensitivity are interrelated; therefore this discrepancy in results must be explained. Largely this lack of differentiation between TCIs and MCIs can be traced down to the instrument used; the DANVA, which assesses subjects’ comprehension of facial expressions, only evaluates the four universal facial expressions (happiness, sadness, anger, and fear). As a result, a participant’s level of intercultural exposure would matter little on this test, as these four expressions are unaltered world-wide (Nowicki & Duke, 2008; Hung and Kim, 1996). A test measuring
more facial expressions or measuring some that differ interculturally, such as doubt, disdain, reverence and amusement, as expressed by Bruce and Young (2000), would likely have yielded a result more useful for this study. Sarbaugh’s (1979) study does elucidate certain elements of communication that remain similar whether intercultural or intracultural, and this is likely such an element.

One significant finding within the emotional sensitivity score was the high self-reported ability of emotional comprehension by the MCIs. The practical score did not corroborate their high self-report. As stated earlier, the TCIs had a marginally higher mean score on the DANVA. The disparity between the MCI and TCI may result from intercultural experience as well. Many emotions are culture-specific (Matsumoto et al., 2007); therefore, TCIs may have based their self-reports on past experiences of adapting to new emotional cues and as a result approach such measures with greater caution.

Gudykunst and Hammer (1988) apply uncertainty reduction theory when discussing intercultural interaction, asserting that the greater the identification with the group, the more the uncertainty is reduced. Identification with the group is created by interacting and adjusting to the social settings of an “in-group” (Gudykunst, Forgas, Franklyn-Stokes, Schmidt, Moylan, 1992). Adjustment to unfamiliar social settings by reducing uncertainty through careful emotional cue reading, on the part of the TCIs, could reflect their caution with emotional comprehension. Reciprocally, MCIs, having stayed within one culture their whole lives, might have had fairly little experience with emotional cue misinterpretation.

The results of this study supports the theory expressed by TCI researchers, but may also lend itself to other arenas of interpersonal studies. As mentioned in the
literature, Kim (2008) proposed the idea of a global individual, who after frequent
acculturation and deculturation forms a “universalized” perspective. The data gathered
demonstrates a difference in social sensitivity and perception between those with such
experiences and those without. This quantitative increase in perception may point toward
a qualitative openness in perception, which might lead to a “universalized” perspective.
Obviously, this conjecture is outside the parameters of this study; however, the
information gathered does indicate plausibility of such a theory and might associate with
cultural consciousness as studied by Langer (1989).

As participants from culturally diverse backgrounds were involved in the study
(Philippines, Sweden, Middle East, Argentina, France, Germany, UK, etc.) it was
necessary to examine each portion of the IPS instruments for cultural bias. The researcher
predicted that both the practical assessments (missing cartoons test and the DANVA)
might be inherently biased toward American participants, as each resembled American
participants in dress and fashion (as in the DANVA) or social situations that are common
to Americans (such as a cartoon depicting Santa Clause) and were created in the United
States for assessment. However, the statistics showed that participants who were not U.S.
citizens scored higher on all tests and surveys taken. Although the difference was not
statistically significant, this shows that the tests given did not favor one nationality over
another. Obviously, it was necessary to know English, otherwise the survey questions
would be incomprehensible, but as all requests for participation in the study were in
English, it seemed unlikely that someone else would know about or attempt to participate
in the web-based survey. These results strengthen the findings, as they show there was
not an unfair disadvantage to participants from other countries.
Although beyond the comparison between TCIs and MCIs, the difference between gender and concurrent IPS was assessed. Many scholars have studied gender differences in interpersonal sensitivity, adaptation and social development (Carney & Harrigan, 2003; Eisikovits, 2000; Gilbert, Irons, Olsen, Gilver, & McEwan, 2006; Razavi & Hassim, 2006; Hammer, Bennett, & Wiseman, 2003); however, this research did not deal with these areas, but aimed to mention relevant variations if found. Carney and Harrigan (2003) found that gender was not significant for IPS.

Likewise, this study generated statistically insignificant results when comparing all male and female participants (although females had marginally higher mean score). However, when using gender as an independent variable along with the TCI and MCI grouping, there proved to be significant interaction effects. Upon closer analysis, it showed TCI men believed themselves to be significantly more socially sensitive than female TCIs believed themselves to be, while conversely MCI men reported a higher emotional sensitivity. These reports align with the explanation above that participants based their self-reports on successful past experiences. TCI males, confident of their global social prowess, project themselves as able in this area, due to successful accomplishment. Whereas on the converse, MCI males recognize their emotional comprehension ability, based on success within their singular cultural emotions. Also noteworthy is that MCI females were the only subjects who generated significant results for practical emotional sensitivity; this may be due to higher abilities at reading facial expressions, or more comfort in judging nonverbal expressions as a result of their fixed environment. As mentioned earlier, this interplay has null effect on the current hypothesis, yet it does show variation from Carney and Harrigan’s (2003) research.
Taking the idea that intercultural adaptation leads to heightened interpersonal sensitivity one step further led the current research to predict that more frequent adaptation and greater levels of exposure would increase an individual’s IPS. It has been argued that “optimizing” one’s communication to differing cultures will increase intercultural competence (Koester, Wiseman, and Sanders, 1993; Wiseman, 2002). Optimizing improves interpersonal sensitivity and takes on many different forms; some catalysts of IPS include length of time in host country and proficiency of language (Swenson & Casmir, 1998). Based on this literature, the current research sought to find facets of intercultural experiences that enhances IPS.

Adaptation, seen as the crux of intercultural competence, is prolifically studied in the arena of intercultural communication. Kim (2002) discussed this process as the establishment of a stable environment with an unfamiliar culture. This process is accomplished by understanding the new culture’s “symbols, meanings, and code of conduct” (Collier & Thomas, 1988) and is deterred by dissimilarity, anxiety, and insufficient cultural understanding (Jandt, 2004). In this study, ingredients of adaptation were selected to rank each participant’s level of intercultural exposure and adaptation in the self-report of intercultural experiences.

The intercultural experience survey incorporated all these various aspects. However, after yielding insignificant results against each portion of the IPS assessment, correlations between each facet of the survey were examined. Koester, Wiseman, and Sanders (1993) predicted quantity of years spent in the host country would affect intercultural competency; however, no correlation was found between the social or emotional sensitivity and only a weak correlation between years in host country and the
self-reported social sensitivity. Again, this correlation likely arises as a result of the TCI’s confidence in their strong social perceptibility, resulting from their practice in diverse situations. Languages known, and the proficiency therein, seemed to be an ideal prediction of optimized intercultural communication; however, no correlations were found between number of languages and any element of IPS. Likewise, number of countries lived in did not generate significant correlations. Individuals who presented their home culture as different from their nationality were examined because this distinction would indicate higher levels of assimilation. Kim (2002) defined assimilation as the interplay of acculturation and deculturation, where both have subsided to reveal a final state of equilibrium. Obviously, this is a theoretical state, but one moves toward this when adapting to intercultural environments. This assimilation might have depicted greater exposure to (or willingness for) intercultural adaption. However, no significant correspondence was seen between these individuals and their IPS and the other TCIs.

The role of attitude has been expressed as significantly vital in adaptation, specifically acculturation, toward a host culture, which is the “process of learning and acquiring the elements of a host culture” (Kim, 1988, p. 51; Shibutani & Kwan, 1965). Motivation toward cultural adjustment is seen as a key factor of intercultural communication (Arasaratnam and Doerfel, 2005). Kim’s (1977) work stated that individuals who willingly involve themselves within host culture networks will be more likely to acculturate. Cox (2004) examined individuals who experienced intercultural adaptation upon their return home and found that attitude toward host culture significantly affected the sojourners re-entry adjustment. Due to this wealth of information outlining the importance of attitude and adaptation, questions were asked
each participant which placed each individual into one of four categories, based on Berry, Kim, and Boski’s (1988) study.

Interestingly, for this study most participants classified themselves as “integrators” and “assimilators,” which differed slightly from Berry’s (2008) prediction that most individuals classify themselves as “integrators” and “separators;” in fact, only five percent of participants classified themselves as separators. The statistical outcome showed no significant difference between any TCI attitude group and their IPS scores. Integrators did rank highest in both social and emotional sensitivity, based on average scores. The researcher predicted this, as integrators wish to maintain both home culture traits and adapt to the host culture; however, in the statistical tests the advantage was not significant.

Reasons for why increased intercultural experiences did not affect the IPS (or its constituent parts) are difficult to explain. One explanation is that once an individual with intercultural experiences has gained heightened interpersonal sensitivity due to his or her adaptation, he or she does not become more proficient. These findings seem to support Haslberger’s (2005) statement which asserts that when “people become immersed in foreign cultures, their whole being gets affected.” One of the effects of this immersion is heightened social sensitivity, as confirmed by the difference between TCIs and MCIIs in this study. Variation within TCIs, as predicted by Colvin and Bundick (2001), was not as pronounced as had been anticipated. Instead, these results indicate if one can be classified as a TCI, one is likely to have a higher level of social sensitivity.

Clearly, the criteria for labeling TCIs must be considered when applying this study’s results to individuals with intercultural experience. Development outside one’s
home country for minimum three years during late childhood (6-12) and one year during early adolescent (13-18) was a requirement. These years are crucial years in an individual’s development of cultural norms as well as formative in his or her ideas of personal identity, as described by Erikson and Piaget (Newman & Newman, 2003; Dacey & Travers, 2002). Perhaps due to the critical time period during the TCI participants’ upbringing, the intercultural adaptation easily moulds astute social sensitivity. After all, these years include learning general social understanding and much of early adolescence revolves around reading and mimicking appropriate social behavior.

Additional criteria included living in each host country reported for a minimum of one year, as short-term stays would not promote adaptation to the host environment; rather, this may promote separation. All TCIs were required to have lived in a minimum one foreign host country for over one continuous year, but most reported two or more countries for at least one year. Finally, the TCI participants must not have been refugees or immigrants to the country of their nationality. If the participant responded with an affirmative statement toward this question, his or her responses would not be considered. Because these individuals made the host country their new home by necessity or choice, they do not typically entertain the desire to return to their original home country, which is crucial to TCI identity. Also, these individuals are not considered TCIs in the definition outlined by Pollock and Van Reken, 2001 that this study closely follows.

Limitations of the Study

The interpersonal sensitivity instrument (Carney & Harrigan 2001) assessed the differences between TCIs and MCIs; however, some of the component instruments were not as beneficial for this study, as for other research. This study compared interpersonal
sensitivity as dependent upon levels of intercultural exposure. On this basis, the DANVA was chosen as it monitors comprehension of four universal facial expressions that depicted emotions. However, given the full spectrum of emotions prevalent, utilizing a research instrument that employs diverse emotions, would have benefited this current study. Swenson and Casmir (1998) assert that emotional cues become more diverse, the more one culture differs from another. In addition, Hall et al. (2006) state that interpreting non-verbal cues accurately is the basis of IPS, therefore assessment of more diverse facial expressions of would perhaps generate a difference between TCI and MCI. Also, the interpretation of emotional expressions were limited to facial cues; however, emotions can be non-verbally communicated in many ways, including body language, voice tone, gestures, and various other signifiers that were not included in this research instrument. The DANVA only tested basic expressions, which remain the same across the world, meaning intercultural experience or would have little or no effect on an individual’s comprehension of such cues. Using individuals from differing ethnic backgrounds and a broader range of emotion (such as contempt, excitement, awe, remorse, aggressiveness, etc), would capitalize on the participants’ emotional comprehension abilities.

Attitude, although widely discussed as pertinent to intercultural adaptation, resulted in insignificant statistical support for the current investigation. The four rankings of attitude used were taken from Berry, Kim, and Boski’s (1988) research based on two self-reported “Yes” or “No” questions. Although simple, this manner of ranking may be too rudimentary. There are numerous studies asserting that intercultural adaptation and attitude hold a correlation that express sharp differences in adjustment, yet the results
expressed in the current exploration show no such difference. If these studies are to be believed, then the four areas, which delineate significant divergence, should yield some manner of differentiation. The opportunity to generalize based on the attitude was limited by sample size and sampling method. Perhaps using another scale for measuring attitude towards intercultural adaptation would have revealed significance between these groups on some level. Alternatively, there may be an over-emphasis on attitude within intercultural literature and the effect of developmental intercultural adaptation is more subconscious than an effect of an active pursuit.

This study utilized self-reports for much of its data collection. Each participant’s intercultural experience data and his or her rankings of emotional and social sensitivity relied upon accurate self-awareness and self-disclosure. The nature of self-reporting, although affirmed by Riggio and Riggio (2001), potentially allows for inaccurate data collection. Scholars have asserted that self-persuasion and limited accuracy in assessment of one’s perceptive ability are prevalent in self-reports (Hall et al, 2006). Due to the nature of study, avoiding such limitations are difficult; however, the dependency upon self-reports may be a reason for some variations in the results.

Conclusions

The findings of this research indicate that lay theories projected by TCI authors (Pollock, 1989; McCaig, 1996; Schaetti, 1996; Eidse and Sichel, 2004) were correct on the basis of TCI perception and social sensitivity being affected by intercultural adaptation and that intercultural experience during formative years creates heightened social sensitivity. Although TCI researchers had not specifically discussed, or empirically
used, the framework of IPS, the concepts that comprise it are commonly expressed in TCI literature and the results suggest this is a useful and reliable tool for measurement.

Ongoing disagreement between the usage of the term “third culture,” discussed in Chapter Two, were not be solved by this research. However, the findings demonstrate a common trait amidst all TCIs observed. Casmir (1993) held to the belief that the third culture was “built” between any two or more individuals from differing cultures upon interaction. Therefore, this view assumes that social sensitivity is not something learned, but rather something innate, which comes to fruition when in an intercultural setting. Mono-cultured individuals, who have not previously experienced intercultural adaptation, would still form a third culture upon meeting an individual of differing cultural background, as both individuals would be adapting their relationship culture to enable the interaction. This being so, perceptual acuity would have been a common trait among all participants surveyed for this research, in which case the difference in social sensitivity should not have been so clearly visible between the MCI and TCI groups.

Neither does this research entirely support Useem and Useem’s (1967) idea of a “third culture.” As merely having the suggested common trait of social sensitivity among participants, resulting from intercultural adaptation, would not amount to a substantial cultural norm. As discussed in the introduction, culture is defined as a “collective phenomenon… something that is shared among people belonging to the same socially defined and recognized group” (Levine, Park & Kim, 2007, p. 207). The suggested heightened social sensitivity among TCIs is unlikely to count as a social behavior sufficing to be classified as its own culture.
In consideration of the ongoing disagreement over the term “third culture,” it may be beneficial to use an alternate term for individuals who have experienced an intercultural upbringing. The current research points toward a significant difference between the two groups; therefore, it would seem that intercultural experience does alter the individual. Perhaps, renaming TCIs to “intercultural individuals” would highlight the role of cultural complexity in their developmental experience.

Further Research

As this is the first quantitative study conducted on TCIs, the implication for more empirical studies that aim at differentiating MCI and TCI factions, would seem apparent. Opportunities for quantitative assessment examining variance between MCIs and TCIs are plenteous. Such investigations could monitor countless dynamics within this sample, including further intercultural adaptation measures, emotional attachment, relationship building, and self-perception. Research on TCIs asserts a multitude of theories about these individuals, many of which are not corroborated with statistical research. Examination of the literature will yield many additional factors that can and should be empirically studied.

Advancing the academic realm of intercultural adaptation specifically could be done by developing a reliable intercultural experience measurement scale. In the current study, assumptions were made based on literature to define some factors that were assumed to affect adaptation. However, clearly outlining and exhaustively studying traits affecting individuals’ adaptation to another culture, would establish a standard for use in future intercultural assessments. Additionally, each facet would need to be measured and assigned values, based on the impact it holds on adaptation.
The role of intercultural adaptation in adults has been more frequently studied in intercultural literature (Casmir, 1993; Kim, 2002; Kim, 2008; Swenson & Casmir, 1998). The difference between developmental intercultural experience as compared to adult intercultural exposure is an area that needs greater study. It would seem the intentional nature of adult intercultural encounters makes them significantly different from that of a child. Kim (2008) asserts that adaptation is almost always a compromise in order to find one’s fit into an environment. This being so, it would hold obvious consequences on the individual should he or she have deliberately chosen this type of behavior versus involuntary finding themselves in the situation and growing up figuring out how to adapt.

As stated in the discussion earlier, the practical emotional sensitivity test employed did not monitor participants’ interpretative skills effectively. The creation of a new test, similar to the DANVA, still utilizing the depictions of individuals’ facial expressions, but specifically tailored for promoting measurement for emotional sensitivity amidst culturally diverse individuals, would broaden future research. This assessment should include pictures of individuals from more varied ethnic backgrounds and should also present a broader range of emotions within the test. The combination of both these traits will create a larger pool of emotional expressions, challenging subjects’ emotional recognition abilities. Ranking the difficulty of the various emotional depictions could also yield a more fine-tuned result.

Perceived cultural differences (PCD) have been identified as a block for interpersonal sensitivity as well as intercultural adaptation (Dodd, 1998; Gudykunst & Kim, 2003). A study focusing on variations of PCD among TCIs and comparing this with MCIs, would broaden the academic understanding of interpersonal sensitivity (IPS) and
intercultural adaptation. One might predict regional PCDs and greater PCDs among MCIs, due to lack of interaction. Results from such a study would elucidate many areas within intercultural studies and would likely yield ramifications of interest to a continually diversifying public.

Correlations between participants’ interpersonal sensitivity scores could be examined with self-reported empathy scores in search of empirical correlation. As discussed in the literature review, empathy has been connected with IPS in the past (Losoya & Eisenberg, 2001; Carney & Harrigan, 2003); however, a significant statistical correlation has not been concretely established. Also, an intercultural examination could be conducted monitoring correlations between TCIs’ empathy and their self-reported host culture attitude scores. If conducted, this would align similarly with Jackson’s (2008) assertion that sojourners strongly empathize with their host culture; however, the results of the study drew little difference between non-sojourners and those with the host culture experience. Studying TCIs, who develop within a cross-cultural context, might yield a very different result than adult sojourners, as studied by Jackson (2008).

The role of education within interpersonal sensitivity was not tested in the current research, nor have researchers in the IPS field significantly addressed this issue. However, scholars frequently assert that “culture” is attained through education (Useem & Useem, 1967; Swenson & Casmir, 1998). If they are correct and social sensitivity generated a strong correlation with education among TCIs, a reasonable assumption could be made that education plays a role in IPS. Future studies aimed at finding agents for improved interpersonal sensitivity might wish to correlate levels of education, or educational experiences, as a means for catalyzing IPS.
Finally, and most importantly, the need for any further research in the TCI area is necessary. As the fast-paced and ever-increasing trend of the global village continues to expand, and intercultural experiences and development become the cornerstone childhood narratives of many individuals, it seems the trajectory of this pattern would call for action on the part of social researchers. Sadly, however, there is a significant lack of scholarly work amassed in this particular area of intercultural studies, even though it affects society’s most vulnerable members—children. Large amounts of qualitative data have been published in popular texts concerning these individuals; primarily framed as self-help books or resources targeting parents in transition. Although these sources mention common trends of TCIs, which are helpful, it is largely based on anecdotal evidence. Instead, the academic community should begin to measure the “confusion of cultures,” which result in descriptions of oneself as, “…I am an island and a United Nations” (Uniquely Me by A. G. James qtd. in Pollock and Van Reken, 2001) and critically assess the ramifications of such a universalized and culturally complex upbringing on an individual.
References


The author’s name shows incorrectly as, “Fred L. Casnir” in the journal.


APPENDIX
INTERCULTURAL EXPERIENCE SURVEY

- Please complete the following survey, answering each question as accurately as possible. Answer questions and fill in blanks or circles (where applicable).

**Gender:** Male/Female

Age: _______________________

**Nationality:** __________________

**Home culture:** _______________

**Residence:** _______________

Are you an immigrant or refugee to country of your nationality? (Yes/No)

Years spent outside home country, at which age? (Ex: 5 years, from 6-18)

____________________________________________________

Number of countries lived in for more than 6 months (excluding home country)?

____________________________________________________

How many languages do you know (excluding native)? (*List & rank proficiency on a 5-point scale*)

<table>
<thead>
<tr>
<th>Beginner</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ______________________ (language)</td>
<td>_________ (rank)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ______________________ (language)</td>
<td>_________ (rank)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ______________________ (language)</td>
<td>_________ (rank)</td>
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<td></td>
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</tr>
<tr>
<td>4. ______________________ (language)</td>
<td>_________ (rank)</td>
<td></td>
<td></td>
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</tbody>
</table>

*Only respond to this section if you grew up abroad, circle Y (yes) or N (no):*

**Keywords:**
- Home culture- the culture of your nationality
- Host culture- culture of the country you live in while abroad

In your host culture was it important for you to maintain your home-culture identity? **Y / N**

While there, did you value and maintain friendships with individuals from host culture? **Y / N**
SELF-ASSESSMENT (Form Two):

- Please rate *yourself* on the following 16 items (*fill in the circle*).
- Rate *yourself* on a scale from 1 (Not like me/Disagree) to 7 (Exactly like me/Agree).

Questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can usually tell when someone feels hostile from that person’s tone of voice</td>
<td>Not like me</td>
</tr>
<tr>
<td>I can usually tell when someone is angry from that person's facial expressions</td>
<td></td>
</tr>
<tr>
<td>I can usually tell if someone feels guilty from that person's facial expressions</td>
<td></td>
</tr>
<tr>
<td>I can usually tell if someone is afraid by that person's facial expression</td>
<td></td>
</tr>
<tr>
<td>When someone feels confident, I can usually tell by that person's tone of voice</td>
<td></td>
</tr>
<tr>
<td>I can usually tell when a person approves of something from that person's facial expression</td>
<td></td>
</tr>
<tr>
<td>When someone tries to please me, I can usually tell from that person's tone of voice.</td>
<td></td>
</tr>
<tr>
<td>When someone feels grateful, I can usually tell from that person's facial expression</td>
<td></td>
</tr>
<tr>
<td>I usually try very hard to understand how others feel</td>
<td></td>
</tr>
<tr>
<td>I am often slow to realize if others do not want me around</td>
<td></td>
</tr>
<tr>
<td>I usually decide if I like someone from their nonverbal cues, not from what they say.</td>
<td></td>
</tr>
<tr>
<td>I think I have a lot of insight into people.</td>
<td></td>
</tr>
<tr>
<td>I can often tell what a person is going to say before that person says it.</td>
<td></td>
</tr>
<tr>
<td>When someone is lying, I can often tell from that person's facial expression.</td>
<td></td>
</tr>
<tr>
<td>I usually can tell if a person is nervous from that person's facial expression.</td>
<td></td>
</tr>
<tr>
<td>I can usually tell if someone is surprised from that person's facial expression.</td>
<td></td>
</tr>
</tbody>
</table>
SELF-ASSESSMENT (Form Three):

- Please rate yourself on the following 16 items (*fill in the circle*).
- Rate yourself on a scale from 1 (Not like me at all) to 7 (Exactly like me).

<table>
<thead>
<tr>
<th>Questions</th>
<th>Scale: Not like me</th>
<th>Exactly like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I accept others for what they are</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>2. I admit mistakes</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>3. I display interest in the world at large</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>4. I am on time for appointments</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>5. I have social conscience</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>6. I think before speaking and doing</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>7. I display curiosity</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>8. I do not make snap judgments</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>9. I make fair judgments</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>10. I assess well the relevance of information to a problem at hand</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>11. I’m sensitive to other people’s needs and desires</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>12. I’m frank and honest with self &amp; others</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>13. I display interest in the immediate environment</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>14. I size up situations well</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>15. I determine how to achieve goals</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
<tr>
<td>16. I display awareness to world around me</td>
<td>□ □ □ □ □ □ □</td>
<td></td>
</tr>
</tbody>
</table>
Diagnostic Analysis of Non-verbal Accuracy (DANVA)

- Each of the below images are shown for two seconds
- After each image is shown, the participant must select the appropriate emotional expression from the following options: sad, fearful, happy, angry
Missing Cartoon Strip

- The following cartoon strips are shown to the participant, each one with a missing cartoon clip
- Each participant must choose the appropriate missing cartoon from the four given options in order to create an appropriate social situation

MISSING CARTOONS

R. deVille, Maureen O'Sullivan and J.P. Guilford

In the *Ferd'nand* cartoon strip below, the third picture is missing. The missing picture is among the four pictures in the second row. If you choose the right picture, the strip will make sense and the feelings and thoughts of the characters will all fit.

Look at sample item 28.

At the end of the story, Ferd'nand is upset and misses his dinner. The little boy is unconcerned. The mother is annoyed and is not making dinner. All these things are happening because Ferd'nand left the kitchen messy, which annoyed Mrs. Ferd'nand. Alternative, then, is the right choice. Pictures 1, 2, and 3 do not complete a series of four pictures that makes sense out of what the people are doing thinking and feeling.

In each item that follows, find the picture that completes the story and blacken the right space for that item on the Scantron answer sheet, starting with Item 1.
Making Sense of Cultural Complexity

Research Website Map

Welcome Page

Survey Registration

Contact Page

Initial User Registration

Return-user Login

Participant Survey List

Social Sensitivity Self-report

Intercultural Experience Survey

Emotional Sensitivity Self-report

Missing Cartoons Test Performance-based Social Sensitivity

DANVA Performance-based Emotional Sensitivity