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COMPARING ADULT ATTACHMENT STYLES AMONG HISPANIC AND NON-HISPANIC UNDERGRADUATE COLLEGE STUDENTS USING THE EXPERIENCES IN CLOSE RELATIONSHIPS REVISED STRUCTURES (ECR-RS)

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COMPARING ADULT ATTACHMENT STYLES AMONG HISPANIC AND NON-HISPANIC UNDERGRADUATE COLLEGE STUDENTS USING THE EXPERIENCES IN CLOSE RELATIONSHIPS REVISED STRUCTURES (ECR-RS)

A DISSERTATION

Presented to the Faculty of the Graduate School of St. Mary’s University in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY in Marriage and Family Therapy

by Guadalupe Flores Valdez, M.S., LPC

San Antonio, Texas

August 2017
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Abstract

Research on attachment in adult relationships has included minimal studies to encompass a Hispanic population. Mexican Americans have specific characteristics grounded in historical, demographic, and family contexts which are different from other groups. Therefore, cross-cultural validation of instruments to assess family relationships increases the clinical usefulness of the instruments. The purpose of this study was to compare the equivalence of the factor structure of a widely used family attachment assessment, the Experiences in Close Relationships-Revised Structures Questionnaire (ECR-RS; Donbaek & Elklit, 2014; Parker et al., 2011). This study used principal components factor analysis with maximum likelihood extraction to compare the consistency of factors of the ECR-RS between Hispanic and non-Hispanic students. Maximum likelihood extraction provides a test of goodness of fit between groups for a two-factor solution as found in the ECR-RS validation studies (Donbaek & Elklit, 2014; Parker et al., 2011). Results showed that the two-factor solution fits the data for both the Hispanic and non-Hispanic populations, with exception of one factor, the best friend relationship domain. The results from this study indicates that the ECR-RS measures equivalent factors in both cultural groups, evidence for a cross-cultural validation of this instrument.

Keywords: attachment theory, cross-culture, experiences in close relationships-revised structures validation, Hispanic Americans
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Chapter I

The Problem and Justification of the Study

The attachment literature is limited in measuring and analyzing attachment styles cross-culturally. The majority of attachment research has been conducted with participants of European descent (Arbona & Power, 2003; Rastogi & Wampler, 1999; van IJzendoorn & Sagi, 1999). Thus, the lack of empirically based cross-cultural attachment research could result in erroneous conclusions. According to researchers Rotgans and Schmidt (2008) the purpose of validating an instrument cross-culturally is appropriate and necessary when Western-based instruments originate from different cultural contexts than the selected sample. In addition, Rotgans and Schmidt mention that cultural psychologists believe most literature to overlook and treat cultural considerations too simplistically. Therefore, research should require a valid attachment screening tool that would accurately measure adult attachment styles cross-culturally.

There are many attachment instruments available in the literature. The majority of the studies that included Hispanics listed all Hispanic individuals under one ethnic category of Hispanic/Latino (Fraley et al., 2011; Parker et al., 2011). After reviewing the collected data, this researcher discovered that placing Hispanics under one ethnic umbrella does not accurately identify or give a clear representation of the breadth of the Hispanic population. However, the participants used in this study attend a university populated by Mexican Americans.

This research punctuates the importance of including individuals of other ethnic populations to gain a better understanding of the attachment phenomenon. Understanding adult attachment styles of marginalized groups would advance the quality and availability of mental health services to the increasing, under-served, and underrepresented minority populations. This
study is significant because there is a lack of culturally sensitive instruments to measure attachment among Hispanic Americans.

This study sought to compare adult attachment styles using the Experiences in Close Relationships-Revised Structures (ECR-RS) developed by Fraley, Heffner, Vicary, & Brumbaugh (2011) comparing Hispanic American and non-Hispanic American populations. The ECR-RS evaluates adult attachment styles in multiple relationship domains of the mother, father, romantic, and best friend as reported by the participant. It is the newest version of the ECR scale which has been used in single and multiple culture samples as previously mentioned and lends support to the cross-cultural validity of the scale. An article by Fraley et al., (2011) reported using factor analysis and test/retest statistical methods in various studies proving statistical significance. The article used specifically for the analysis section in this study by Parker, Johnson & Ktering (2011) assessed adult attachments along with a clinical sample by conducting a series of exploratory factor analyses which supported a factor structure of the earlier version of the ECR by Brennan, Clark, & Shaver (1998).

Background

Attachment theory has gained much interest in various disciplines and has evolved over the years. The early work of John Bowlby’s research looked at the child and care-giver relationship to newer interests of studying the relationship-specific contexts in adult attachment styles continues to attract many researchers. The importance of using a reliable instrument that will measure adult attachment styles is necessary for the field. A cross-cultural and valid instrument that will measure adult attachment styles in other ethnic populations is also vital. In attachment research, the Hispanic Mexican-American group has not been adequately represented
or properly identified. Including this population in current and future studies would improve mental health services to this unrepresented group and expand the attachment theory.

**Attachment theory- overview.** There are many past and current professionals who have studied children and their development by observing their attachment styles with their parents and caregivers. Attachment theory developed through the growing interest and research by past and present researchers on child, adolescent, parent and romantic attachments (Fraley & Shaver, 2000). Therefore, understanding the appropriateness of using an instrument that will measure this phenomenon of the attachment pattern is vital. Current researchers have taken this attachment theory from observing the parent-child relationships to focusing this attachment framework to behavioral patterns in adult romantic relationships. Fraley and Shaver (2000) report that this attachment framework attracts various professionals across disciplines because the theory offers an explanation of emotional regulation, human development, why individuals maintain and dissolve relationships, personality traits and psychopathology.

A shift occurred in the field of psychology as early theorists moved from psychoanalytic models to interpersonal psychoanalytic models. These newer approaches in the 1950’s reflected work with children and emphasized the emotional aspects of attachment and separation in human relationships (McWilliams, 2009). John Bowlby and Mary Ainsworth pioneered attachment theory and research in the early 1950’s (Van Dijken, 1998). The early attachment theory provided a framework for understanding early childhood development and categorized three main attachment styles which included secure, avoidant, and anxious/ambivalent attachments as coined by Mary Ainsworth’s three-fold taxonomy of attachment styles (Hazen & Shaver, 1987). Today, attachment research provides explanations of childhood development, adult relationship patterns, adult romantic relationships and adult functioning (Waters, Crowell, Elliot, Corcoran, &
Treboux, 2002). Ciechanowski, Worley, Russo, & Katon, (2006) saw components of attachment styles as bi-dimensional, including the secure, fearful, pre-occupied, and dismissing attachments. These attachment styles offer an explanation for how individuals incorporate their early childhood experiences with their caregivers and transcend similar attachments in adulthood, according to Ciechanowski, et al., (2006). Attachment theory is widely accepted and applied in clinical settings and research has evolved to encompass adult relationship patterns.

**Hispanic/Mexican Americans.** The Hispanic population is diverse and represents twenty-one Spanish-speaking countries. In North America, Hispanics originate from Mexico, Central America, South America, Caribbean Islands, Puerto Rico, and Cuba (Flores, 2000). These distinct characteristics include traditions, language, customs, and values. Mexican Americans largely populate the boarders between the U.S. and Mexico. In this study, the majority of the Hispanics were attending a university in one of the southern states which borders Mexico. Immigrants from southern states are known to have struggled with stress related to acculturation and assimilation (Baca-Zinn, 1998). California, Texas, and Colorado are the largest Hispanic states (Flores, 2000). The undergraduate students, from a Southern Texas University used in this project, are significantly populated with Mexican Americans consistent with the population in this area (St. Mary’s University Diversity, 2017).

Flores-Ortiz (2000) found characteristics among Mexican Americans that are grounded in historical and demographic information which separate them from other sub-groups of Hispanics; by extension, the Hispanic culture is not monolithic. There are a few areas clinicians and researchers should understand when working with this unique and diverse group. One important consideration for mental health professionals is the historical effect of social injustices and despair found among minorities and their families. Flores-Ortiz reports that most individuals
who have experienced oppression encounter feelings of shame, guilt, anger, and powerlessness. These feelings often transcend multiple generations if left unattended. Further, she called out the importance of recognizing that intimate partner violence, child abuse, and social violence are merely expressions of oppression experienced by minorities who have been dominated for centuries.

The lack of empirical studies in attachment theory conducted with Hispanic Americans in this area prevents effective strategies for researchers, clinicians, and mental health professionals to reach this disadvantaged population. The need to improve attachment research requires the inclusion of this minority group. Nichols and Schwartz (2006) state that many researchers and professional organizations are striving to become more culturally sensitive, yet most do not include people of color in early iterations of research. Failure to investigate the impact of diversity on the attachment framework creates generalizations and assumptions.

Duffey (2000) points out characteristics found in the Hispanic sub-group of Mexican American families, and he shows that Mexican Americans are the dominant Hispanic group in the United States, compared with the number of Hispanic individuals from Puerto Rico and Cuba living in the United States. Among these three groups, Mexican Americans have similar characteristics compared to other Hispanic groups in the areas of patriarchal and extended family systems. Flores-Ortiz (2000) stated that Hispanic families are exceptionally close with extended family members. Traditionally, Hispanic fathers are considered the head of the households and mothers are responsible for nurturing the children (Duffey, 2000). Flores (2000) introduced “intrafamily abuse”, a problem common with groups who have experienced racism and evidenced as power inequalities within a family. These inequalities occur when family members abuse their authority and when issues of domestic violence, child and sexual abuse occurs within
the family. This understanding of attachment will assist clinicians reach clients/families by recognizing the history of violence and the extent of abuse to bring a sense of balance and healing to the family (Flores, 2000).

Duffey (2000) also pointed out other interesting characteristics found in the Hispanic sub-group of Mexican American families and mentions Mexican Americans are the dominant Hispanic group in the United States compared with other Hispanic sub-groups of Puerto Ricans and Cubans.

Rastogi and Wampler (1999) found a need to explore relationship bonds, emotional connections, and interdependence using multiple culture samples. These authors note that attachment patterns were culturally appropriate in their findings, however further investigation of differences between various cultures would adequately determine if the attachment framework is culturally universal. This study will investigate adult attachment styles among college students of Hispanic and Non-Hispanic Americans.

Rastogi and Wampler (1999) raise the concern that using people of one culture in studies, no matter how similar the culture to another culture, the results of the study will not accurately represent cultures other than those specifically studied. Therefore, when comparing Mexican Americans to any other Hispanic group, however similar in areas of beliefs, ideas, values, and language should be represented independently and with clear distinctions disclosed by the participants. Cultural differences are unique and worth exploring further using the attachment theory framework. Clinicians and mental health professionals should examine specific characteristics and recognize family dynamics for appropriate assessment and treatment planning. There are certain characteristics which separate Mexican Americans from other Hispanics which include traditions, language, customs, and values (Flores, 2000). For greater
accuracy, research should focus on clear distinctions among the Hispanic sub-groups (Mexican American, Cuban American, Puerto Rican Americans, etc.) to yield accurate results when using a specific sample. These improvements would create a better understanding of similarities and differences, if any, in cultural influences found within the Mexican American group.

In Mexican American culture, ideas related to acculturation, male dominance, and familism are noted as contributing factors in investigating perspectives of romantic love, intimacy, and marital satisfaction (Contreras, Hendrick, & Hendrick, 1996). This characteristic of familism is considered sacred and held in highest regard by most Hispanic families (Baca Zinn, 1998). Familism, in most Mexican American families, is the hallmark of the structure of how the family operates as a group. This form of collectivist structure and value is centered on the needs of the family which are greater than the needs of the individual. Therefore, therapeutic implications and interventions must address this family dynamic (Flores & Carey, 2000).

Mexican Americans are the oldest minority group in the United States which can be traced back for centuries (Flores, 2000). The Mexican American family traditionally is close-knit and includes the extended family members as well. Mexican American males are viewed as heads of the household and Mexican American women are viewed as nurturers and carry the responsibility of caring for their families. The elderly are normally cared for and live with their adult children (Flores, 2000). These Mexican American families carry a deep commitment of responsibility to the family and extended family members (Duffey, 2000). In some cases, these traditions are sometimes lost as US born Mexican Americans do not struggle as much with acculturation and assimilation when compared with their ancestors for various reasons. This is true for first, second, third, or fourth generation of individuals born in the US. Nonetheless, the issues of poverty, gangs, crime, employment opportunities, inadequate housing, education, and
balancing two cultures are still great struggles for Mexican Americans; whether they were or not born in the United States (Flores, 2000). Close relationships are highly significant in Mexican American families; yet, the cross-cultural investigation into these relationships is limited in attachment literature.

It is important to study the political climate as it relates to the Hispanic population (Urrabazo, 2000). It is important to be culturally sensitive to the cultural, beliefs, traditions, and other important characteristics of similarities and differences among this group. For example, Mexican Americans living in Los Angeles would have a different upbringing than those living in Texas, New Mexico, Arizona, etc. (Flores, 2000). Further, demographic differences would include those Mexican Americans living in larger cities such as Houston, Dallas, or San Antonio than those living in southern parts of Texas, such as; Harlingen, Brownsville, or Laredo.

Urrabazo (2000) stressed that culturally sensitive clinicians must address history, culture, and language in order to reach this segment of our society. These three important areas are relevant for clinicians to enhance their knowledge base when working with Mexican Americans or other Hispanics in a therapeutic setting. Specifically, Duffey (2000) positioned therapists to have the ability to identify cultural differences in minority couples. Thus, understanding attachment styles and the cultural influence it has on family history and behavior is foundational (Wei, Russell, Mallinckrodt, & Zakalik, 2004). This variety of factors and barriers add to the growing problem known all too well for minority children, couples, and families as services are not designed specifically to address their needs. The impact is disturbing for Mexican Americans living in disenfranchised communities when governmental assistance and resources fail to reach the vulnerable and underprivileged. Therefore, studying these areas of interactions and contextual information would advance attachment research limited in this area. For this
investigation, the translation of the instrument was not needed because the participants speak English. However, understanding basic cultural differences is necessary for mental health professionals working with minority populations.

Researchers that have described how to cross-culturally validate an instrument in the literature. Sousa and Rojjanasrirat (2010) reviewed several highly recommended methodological approaches and provided a user-friendly summary list of their recommendations for the translation, adaptation, and cross-culturally validating an instrument in their work. In the area of translation, these authors mentioned a few key points which include the use of two qualified translators to interrupt the original instrument. They recommend that one of these translators should be knowledgeable in the content area of the material and the construct of the instrument. According to this same article, the other translator should be knowledgeable in the cultural and linguistic nuances of the target population. They suggest using a third team of translators who are independent of the first two translators to resolve ambiguities and discrepancies in the translation of the instrument. Lastly, Sousa & Rojjanasrirat indicate that pre-testing the translated version of the instrument is essential before using the final version of the instrument in full psychometric testing in the sample population. These authors mentioned this step takes several years and more than one study. In addition, the authors offer multiple statistical approaches to cross-culturally validate an instrument and recommend using exploratory factor analysis to test the factor structure of the instrument.

The selected instrument used in this project, is the Experiences Close Relationships-Revised Structures (ECR-RS). There are earlier versions of the scale, The Experiences in Close Relationships (ECR) and The Experiences in Closed Relationships Revised (ECR-R) which have been used in empirical articles to measure attachment styles in various cultures and various
investigators have explored its’ psychometric properties through test and re-test trials (Farley et al., 2011; Wongpakaran, Wongpakaran, & Wanarit, 2011; Ehrenthal, Dinger, Lamia, Funken, & Schauenburg, 2009; Tsagarakis, Kafetsios, & Stalikas, 2007; & Fairchild & Finney, 2006). Therefore, we chose the ECR-RS for use in this study as it has been proven to be a valid scale for measuring adult attachment and verifying its validity within the Mexican American population is a natural progression of use by the research community.

**Statement of Problem**

The purpose of this study is to compare adult attachment styles in a college-aged sample of Hispanic and non-Hispanic adults using the ECR-RS. Thus, expand the existing literature in comparing attachment styles in college students of Hispanic and non-Hispanic descent in various relationships. As previously stated, the ECR-RS is a valid scale to measure students’ adult attachment styles in this context. It is hypothesized that participants from a similar culture will likely have attachment styles culturally appropriate with variations in relationship domains. This study will ascertain distinct similarities and differences in relationship styles between the two groups. The adult relationship styles of 199 undergraduate college students will be compared. The ECR-RS and the earlier versions of the scale, The Experiences in Close Relationships (ECR) and The Experiences in Closed Relationships Revised (ECR-R) have been used in empirical articles to measure attachment styles in various cultures (Farley et al., 2011; Wongpakaran, Wongpakaran, & Wanarit, 2011; Ehrenthal, Dinger, Lamia, Funken, & Schauenburg, 2009; Tsagarakis, Kafetsios, & Stalikas, 2007; & Fairchild & Finney, 2006). According to these authors, the instrument is reliable in both the internal consistency and reliability.

The attachment literature has expanded over the last two decades investigating romantic attachment and much information has been discovered. However, attachment theory has not
escaped controversy. Earlier researchers believed there were problems in the attachment literature which included studying adult attachment styles cross-culturally to include individuals of Hispanic descent and if attachment theory is accepted universally among other various cultures (Wei, et al., 2004; van IJzendoorn & Sagi, 1999). Attachment researchers believed the European origin of attachment theory and the definition of secure attachment viewed as a Western norm were problematic (Rastogi & Wampler, 1999). Therefore, understanding attachment similarities and differences in Hispanic cultural issues pertaining to intrapersonal relationships is necessary (Wei, et al., 2004; van IJzendoorn & Sagi, 1999).

**Research Questions**

The purpose of this study is to compare the factor structure of the ECR-RS across cultural groups of Hispanic and non-Hispanic descent of undergraduate participants. Using exploratory factor analysis, the study will compare if the two groups have similar factor structure in understanding their experience of attachment in four distinct relationships; mother-like figure, father-like figure, spouse/romantic partner, and best friend. The central research question is: *Does the obtained factor solution for Hispanic and non-Hispanic participants fit the expected factor structure derived from the original ECR validation studies?* In Chapter 4 of this study, articles by Donbaek and Elklit (2011) and Parker, Johnson, and Ketting (2011) are reviewed and compared to this study as original ECR-RS validation studies. The researcher solicited students in introductory classes enrolled in a private southwestern university for this study.

The ECR-RS evaluates adult attachment styles in multiple relationship domains of the mother, father, romantic/spouse, and best friend as reported by the participant. The ECR-RS is scored in two dimensions, anxiety and avoidance for each domain of the intimate relationship (Fraley et al., 2011). A common assumption is that highly acculturated minority groups do not
differ from the assessment norms typically developed with majority groups (Padilla & Borsato, 2008). This assumes that both groups have had similar experiences related to the assessment. However, evidence suggests that even acculturated Hispanic persons retain aspects of their culture, specifically a high value of familialism (Flores & Carey, 2000). These aspects of culture may influence the norms related to the assessment of attachment within family relationships.

The study compares a group of Hispanic and non-Hispanic undergraduate students attending a South Texas private university. Exploratory factor analysis assessed if the constructs measured by the ECR-RS has similar meaning across the two groups. Another research question that this study explored was “Will attachment styles differ between Hispanics and non-Hispanics among a sample of undergraduate students in a private South Texas University?” One of the goals of this study is to add to the existing body of knowledge of adult attachment using the ECR-RS Questionnaire. Clinicians can expand their understanding of certain characteristics and family structure found specifically in Hispanics through this quantitative study. Thus, improve assessment and treatment planning for individuals of Hispanic descent. This information adds to the attachment field because little is known about the attachment styles of individuals of Hispanic origin (Tacon & Caldera, 2001).

**Justification for Study**

This research is important because of the continual demographic changes among multiple generations of individuals of Hispanic descent. Therefore, a cross-culturally sensitive instrument with sufficient validation is vital for attachment research. Taylor (1998) referred to the Hispanic population as a group constantly changing over time and from one generation to another, which includes the sub-group of Mexican American minorities. Therefore, clinicians applying the
attachment lens with Hispanic families experiencing challenges, distress, and discord, would be able to better serve this population by addressing contextual information. The reliability and validity of an instrument is the challenge most researchers face in any given study. The ECR-RS is an assessment instrument used to measure adult attachment across relationships; not only in romantic but in a variety of close relationships. As seen in the review of the literature in Chapter 2, the attachment instruments were used only once and the authors did not conduct any follow up studies replicating their work to bridge the gaps in attachment literature across cultures. Out of the twenty-one scales used in the six studies, six measured attachment specifically. These instruments investigated a variety of different aspects in Mexican American relationships using various scales raising concerns about treating culture too simplistically. What is needed in the research is more continuity of instruments to increase comparability and replication by taking a deeper look at culture and its’ influence on attachment.

There are many professionals who have studied child development by observing their attachment styles with parents and caregivers. Attachment theory has developed largely because of the growing interest and research on child, adolescent, parent, and romantic attachments (Fraley & Shaver, 2000). John Bowlby, the British child psychiatrist who founded attachment theory, proposed that bonds between individuals and caregivers produce internal working models that serve as a template guiding interpersonal expectations and behaviors throughout the human lifespan (Bowlby, 1982).

Early theorists believed that adult personality problems were rooted in childhood traumas; Sigmund Freud believed that psychological patterns originated in child development and the child-parent relationship (Van Dijken, 1998). Other theorists, like Harry Bakwin, Ana Freud, Rene Spitz, and Donald Winnicott, all observed children’s behaviors during separation
from their mothers (Van Dijken, 1998; Patterson & Hidore, 1997). Bowlby’s investigations and research strengthened the view of attachment which stated children who are separated from their mothers have immediate and long-term effects on their emotional development (Bowlby, 1982). During this time, the importance of maternal attachment was viewed as insignificant largely in part because psychoanalytic theory proposed that this attachment bond was fantasy based and sexual in nature (McWilliams, 2009). Bowlby’s ideas, controversial during his time, helped to enhance the notion that human attachment is part of survival (Bowlby, 1982). Later, Sue Johnson (2008) stressed the belief that adults have biological needs for emotional closeness that are foundational in adult relationships – a central tenet in Bowlby’s attachment theory.

Limitations

One noteworthy limitation is the collected sample of college educated young adults; a population with certain familial characteristics which may be due to institutional constraints as a strong sample bias. This may include socio economic, education, young age, acculturation, or religious beliefs. Another limitation, in this research study is the data collected from the undergraduate students enrolled in a southern and private university. Thereby, another sample bias based on students residing in an area where the majority are Hispanics with possible social constraints and how they may react differently to this sensitive topic. With regard to gender, both male and female students were invited to participate.

Definition of Terms

Mexican Americans. A few characteristics found in Mexican American culture and traditions vary from the language to celebrations and social norms. Mexican Americans are citizens of the United States but can trace their ancestry heritage to the country of Mexico. Mexican Americans are normally concentrated in the states of Texas, New Mexico, Arizona,
California, and parts of Colorado (Flores, 2000). There are constant cross-cultural exchanges between the United States and Mexico likely due to proximity. The language is primarily English, or a combination of English and Spanish known as “Spanglish” or “Tex-Mex”. Traditions, including food, are influenced by heritage roots from Mexico. Family and social roles are mostly patriarchal and male dominated, but lessen with assimilation. However, when seeking advice or guidance these roles are then considered hierarchical (Bravo, 2005).

**Experiences in Close Relationships Revised Structures (ECR-RS).** The ECR-RS is the selected instrument used to compare and measure attachment styles among the participants in the study. This particular instrument in adult attachment research is used cross-culturally among undergraduate students throughout the world (Alonso-Arbiol, Balluerka, Shaver, & Gillath, 2008; Lee, Grossman, & Krishnan, et al., 2008; & Wongpakaran, et al., 2011). This assessment instrument is a tool used to measure adult attachment across relationships; not only in romantic relationships but in a variety of close relationships. This tool contains 9 items in four domains; mother-like, father-like, spousal/romantic partner, and best friend relationships. The self-report scales look closely at anxiety and avoidance across those distinct relationships mentioned based on the relationship functioning and conveniently provides scoring instructions in their article to replicate their work in attachment research (Fraley, et al., 2000).

This online questionnaire consists of 7 questions related to the participant’s demographic information such as gender, current relationship status, the length of the romantic relationship, country of residence, ethnicity, and a question if this assessment has been taken previously. An additional question pertaining to the generation of their birth in the United States was included in the survey.
Chapter II

Literature Review

Mexican Americans have specific characteristics grounded in historical and demographic information which are different from other sub-groups of Hispanics, as the culture is not monolithic. With respect to cultural differences among Hispanic and non-Hispanic populations, a cross-culturally validated instrument increases the usefulness of the instrument. Cross-cultural instrument validations are needed to produce culturally appropriate scales for minority populations and aid the definitions of adult attachment styles that differ between cultures. A purpose of this study is to compare the factor structure of a college-aged sample of Hispanics and non-Hispanic participants.

Attachment Instruments Using Mexican American Participants

A closer look at the various attachment instruments used in across six studies using Mexican American participants can be found in Table 1, including studies using a single or multiple cultural sample are listed. Overall, the majority of attachment instruments were used one time and the authors failed to conduct follow up studies replicating their work leaving impressions which lacked in consistency, reliability, and validity of the instruments. Four out of the six studies used a multi-culture sample while the other two did not. Included in Table 1 are six instruments which measured attachment specifically, two additionally measured acculturation.
Table 1

*Instruments used in studies of attachment and culture among Mexican American population*

<table>
<thead>
<tr>
<th>Study</th>
<th>Measures of Attachment</th>
<th>Measures of Acculturation</th>
<th>Attachment Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>single culture sample</td>
<td>multiple culture comparison</td>
<td>Adult Attachment Scale (AAS)</td>
</tr>
<tr>
<td>Contreras, Hendrick, &amp; Hendrick (1996)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rastogi &amp; Wampler (1999)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tacon &amp; Caldera (2001)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Arbona &amp; Power (2003)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cota-Robles &amp; Gamble (2006)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
The use of a reliable scale is evident when examining the six attachment scales used in Table 1. What is needed in the research is a more continuity of instruments to increase comparability and replication and an instrument proven to measure attachment cross-culturally. The twenty-one instruments used measured various constructs. In carefully studying these scales, only three used factor analysis proving acceptable validation. These three instruments were the Adult Attachment Scale by Collins & Reed (1990) Children’s Report of Parental Inventory by Schaefer (1965) and the Attachment Q-Sets by Waters & Deane (1985). The 18-Item Scale by Cota-Robles (2002) used Cronbach’s Alpha to check internal consistency of the scale with acceptable validity. Three of the instruments were developed or modified by their listed author or authors which may be problematic (Contreras et al., 1996; Rastogi & Wampler, 1999; Cota-Robles & Gamble, 2006).

The Adult Attachment Scale by Collins & Reed (1990) was the only instrument used twice in two of the separate listed studies in Table 1. Collins and Reed (1990) used confirmatory and exploratory factor analysis to establish validity for their scale proving acceptable results. All six of the studies examined had a common thread. Their findings mentioned the importance of including other minority populations in future attachment research. The inclusion of Hispanics used in attachment studies would add to the growing fascination of adult attachment (Fraley, 2000).

Table 1 includes the authors and year study was published, if a single culture sample or multi-culture sample was used, and the attachment instruments used in the study. Overall, the studies yielded clear distinctions found in individuals, couples, and families of Mexican descent.

In Study 1, Contreras et al., (1996) compared marital love and satisfaction in 54 Mexican American and 30 Anglo American couples; thus, using a multiple culture comparison. These
authors used five separate instruments to measure acculturation, marital adjustment, relationship satisfaction, and relationship and sexual attitudes. The Relationship Assessment Scale measured attachment specifically and the Acculturation Rating Scale measured acculturation. The instruments used in this study were:

1) Acculturation Rating Scale for Mexican Americans (Cuellar, et al., 1980)
2) Dyadic Adjustment Scale (Spanier, 1976)
3) Relationship Assessment Scale (Hendrick, 1988)
4) Love Attitudes Scale (Hendrick & Hendrick, 1986)
5) Sexual Attitudes Scale (Hendrick & Hendrick, 1987)

The participants were couples from the urban southwestern part of the United States. These couples were college educated (50%, 2-years of college). They were primarily Protestant (44%) or Catholic (45%), married less than twenty years (86%), first marriage (91%), 1-4 children (69%), and ¼ of these couples did not have children. In this study, Mexican American cultural ideas were related to acculturation, male dominance, and familism which were contributing factors in investigating perspectives of romantic love, intimacy, and marital satisfaction. Contreras et al., (1996) concluded that the measures used were designed primarily for non-Hispanic participants. Therefore, these researchers encouraged others to use an instrument free of cultural bias and avoid generalizations in future studies.

In Study 2, Rastogi and Wampler (1999) measured adult daughters’ relationships with their mothers. These adult daughters were 31 Anglo Americans, 30 Mexican Americans, & 30 Asian Americans. The authors used a multiple culture sample in their study. The Adult Attachment Scale measured attachment and the Mother & Daughter Questionnaire measured the mother-daughter relationships; similar to attachment. The three instruments used were:
The participants were women between 25-35 years of age and residing in two Texas cities. The majority were educated, married (56%), and did not have children (72.5%). In this comparative study the authors investigated cultural differences in the areas of closeness, reliability, and collectivism in mother-daughter relationships. Interestingly, this study cited the Mexican American daughters lived in close proximity to their mothers. The authors noted that the Adult Attachment Scale (AAS) and the Mother & Daughter Questionnaire (MAD) were culturally sensitive and tested to assure the reliability and validity of the instruments. In their findings, they mentioned the need for researchers to explore the relationship bonds, emotional connections, and interdependence further. The authors noted that attachment patterns were culturally appropriate. They stated the importance of investigating the differences between various cultures. This would adequately determine if the attachment framework is universal when central tenets of attachment theory are rooted in western thought. Therefore, viewing Americans of Mexican origin within the context of family norms, structure, and dynamics is necessary. Using the information from this study, the authors suggested that researchers must adhere to cultural differences among various groups.

Study 3, Tacon and Caldera (2001) investigated if there was a correlation between attachment and parental styles along with acculturation in Mexican American. This investigation used a multiple cultural sample comparing 96 Mexican American women among 59 non-Hispanic women. The instruments used were:

1) Adult Attachment Scale (Collins & Reed, 1990); and
2) Short Acculturation Scale (Martin et al., 1987).

These college women were from a southwestern university and between 18-24 years of age. The authors stated there were more similarities than differences in the area of attachment styles among these two ethnic groups. They found that parental styles were related to attachment styles. Yet, in both groups there was a difference in maternal and paternal care giving styles which the authors suggested a focus on the father-child relationship is needed in future studies. These authors additionally noted that the attachment instruments used in previous literature may not have been compatible with Mexican American samples because of their original design for Anglo-American samples. Therefore, they concluded that the attachment instruments used in previous studies may have been culturally biased in their design and inappropriate to measure attachment in Mexican Americans. In this study, Mexican American culture was highlighted and the importance of future attachment research using this minority population encouraged.

Study 4, in Table 1 by Arbona and Power (2003) used a multiple cultural sample comparing parental attachment styles to self-esteem and involvement in antisocial behaviors among adolescents in three different ethnic groups. The participants were 661 European Americans, 434 Mexican Americans, and 488 African Americans. In this particular study, only the Inventory of Parent & Peer Attachment measured attachment, the other instruments measured other constructs. The five instruments used in this study were:

1) Inventory of Parent & Peer Attachment (Armsden & Greenberg, 1987);

2) Emotional Autonomy Scale (Steinberg & Silverberg, 1986);

3) Children’s Report of Parental Behavior Inventory (Schaefer, 1965);

4) Rosenberg Self-Esteem Scale (Rosenberg, 1965); and

5) 10-Item Questionnaire (Jesser & Jesser, 1977).
The sample consisted of high school students from six large high schools in a southern metropolitan school district between 18-19 years of age. These instruments measured attachment, self-esteem, and antisocial behaviors of adolescents. In the groups studied, a secure attachment pattern with their mothers and fathers was an indicator for higher levels of self-esteem and less involvement in antisocial behaviors in the adolescents. According to these researchers, the self-report scales supported what attachment theory has formulated over decades of the secure attachment pattern. Arbona and Power (2003) stated that the Mexican American students represented the lower socioeconomic class whereas the European Americans represented the middle socioeconomic class. The differences in socioeconomic status proved to these authors that new findings in understanding the usefulness of attachment theory in other ethnic, racial, and lower socioeconomic groups is needed.

In study 5, Cota-Robles and Gamble (2006) was similar to the previous investigation by Arbona and Power (2003) because the parental attachment styles and juvenile delinquency were examined. The authors in this particular article measured if parental monitoring would decrease the risk for delinquency. This single culture study included 454 Mexican adolescents from two-parent families attending a southwestern high school located one hour from the United States border. The 18-Item Scale is the only attachment instrument in this study among the four instruments used in this study:

1) 6-Item Scale (Patterson & Stouthamer-Loeber, 1984);

2) The 18-Item Scale (Cota-Robles, 2002);

3) The 24-Item General Delinquency Scale from the National Youth Survey (Elliot, Huizinga, & Ageton, 1985); and

4) 26-Item Variation Scale (Rodriguez & Weisburd, 1991).
These authors designed their own scale and translated into Spanish. Furthermore, 20% of these participants took the Spanish version of the instrument. In this study, securely attached adolescents reported a healthier self-esteem and had less involvement in antisocial behaviors consistent to attachment theory formulations. Cota-Robles & Gamble (2006) stated there is a lack of empirical research measuring if parent-teen attachment is a predictor for reducing delinquency in Latino youth. The research findings concluded that of 454 adolescents, gender roles did not lessen the attachment relationship. This is alarming, as Vega & Lopez (2001) cited the Latino youth population as the fastest growing group reaching 40% and under the age of eighteen. Without the empirical data in this area, Cota-Robles & Gamble (2006) reported this particular group would not receive the mental health services needed. Yet, another travesty, Blau & Kahn (2007) reported that in 2003, 8.2% of the US population was of Mexican descent, less educated, and of lower economic status.

Study 6, Howes, Wishard-Guerra, & Zucker (2008) examined a single culture sample among the mother-daughter attachment of Mexican immigrants. Peer interactions and development were investigated. The participants were 88 children and their mothers participating in a local Early Head Start National Evaluation Research. The children were observed and mothers were interviewed using three separate instruments. The two instruments used in this study were:

1) Attachment Q-Sets (Waters, 1990) Peer Play Scale (Howes & Matheson, 1992)

2) Children’s Behavioral Ratings (Ladd, 1999)

The mothers were between 14-35 years of age, Mexican immigrants (82%) residing in the United States with the majority speaking only Spanish (91%). Half of the children were females (50%), the families were poor, and the mothers had an average 8.7 (eighth grade, 7 months) level of
education. Research assistants conducted home and site visits which lasted two to three hours when children were 14, 24, 36, and 54 months. The authors concluded that children with secure mother-child attachments were more likely to engage in complex play with their peers. The authors explored certain dynamics in place found in Mexican families. First, learning occurs through experiential learning which is seen as mothers teach their daughters domestic chores (i.e., how to cook, clean, iron, etc.).

According to Howes, et al. (2008) children in some cultures learn social, pretend, and complex play through peer to peer interactions. In other cultures, play is viewed as an opportunity to have fun. These authors stated that families of European descent are more engaged and interactive with their children in this area of play than the families of Mexican background. Their research focus is important, according to these author’s view, play is a child’s opportunity to advance in social interactions and expand their language. These authors reported that Spanish speaking children are believed to be at risk in excelling academic achievement and school readiness because of the language barriers. These observations explored the complex and competent play of children with mothers who were experiencing high levels of stress related to immigration and poverty. Therefore, Howes et al. suggested the need for longitudinal research with families of other ethnic and diverse populations to better understand childhood development.

In five of the six studies, parental attachment was the primary variable of interest. In one of the six studies, marital satisfaction (Contreras, Hendrick, & Hendrick, 1996) was the primary variable of interest. Five of the six studies, Rastogi and Wampler (1990), Tacon and Caldera (2001), Arbona and Power (2003), Cota-Robles and Gamble (2006) and Howes et al., (2008) focused on attachment patterns between parents and children which does not reflect the current
interest in examining adolescent or adult dyadic relationships (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010).

**Attachment Instruments & Culture**

Table 2 examines the validation of attachment instruments used in single and multi-culture studies. The authors selecting the ECR (1998) and ECR-RS (2011) did not specify which sub-group of Hispanics was studied. The majority of these studies had a relatively low percentage (1.9% and 4.2%) of this minority population which is troublesome when attempting to understand the attachment framework cross-culturally. For example, in the first study by Parker, Johnson, & Ketring (2011) used the ECR scale and reported 1.9% of participants were Latino in their study, but failed to identify the participant’s ethnic heritage. In the second study, using the ECR-RS scale, Fraley et al., (2011) 4.2% of the participants were Latino, and they did not define that population any further. The ethnic heritage of the samples used in the studies by Hayden, Roisman, Marks, & Fraley (2011) and Schwarz, Barton-Henry, & Puzinsky (1985) were also left undisclosed. The authors in these studies primarily focused on the reliability, validity, and factor structure of the instruments without comparing attachment styles among various ethnic backgrounds.
### Table 2

**Instruments used in studies of attachment, culture, and instrument validation**

<table>
<thead>
<tr>
<th>Study</th>
<th>Instrument Used</th>
<th>Single Culture Sample</th>
<th>Multiple Culture Sample</th>
<th>Psychometric Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>Haydon, Roisman, Marks &amp; Fraley (2011)</td>
<td>Adult Attachment Interview (AAI) 1985</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tasso et al. (2012)</td>
<td>Adult Attachment Scale (AAS) 1990</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Only two of the six instruments were tested specifically on a Mexican American population when using a multiple culture sample, and reporting instrument validation: the ECR and ECR-RS. The ECR-RS is the most current revised scale the selected attachment instrument used for this study (see Table 2). Comparing attachment styles among Hispanic and non-Hispanic college students in various and close relationships using the ECR-RS would add to the attachment field. Table 2 shows that researchers have used the factor analysis statistical method to validate and investigate psychometric properties of their scales. Therefore, in order to replicate previous attachment studies, undergraduate students will be solicited and the factor structure using factor analysis to validate the ECR-RS will be examined.

**Attachment Instruments & Validations**

John Bowlby focused on the emotional bonds between parent and child followed by Mary Ainsworth who originally coined the three attachment patterns from Bowlby’s work through her famous observational studies (Alonso-Arbiol et al., 2008). The earlier attachment instruments were not designed to connect attachment patterns from child-parent attachment into adult attachment. Today, attachment theory is widely accepted and applied in clinical settings and research has evolved to encompass adult relationship styles (Fraley, 2000).

In Table 2, Parker, et al., (2011), Tsagarakis, et al., (2007), and Fraley, et al., (2011) used the attachment instruments ECR, ECR-R, and ECR-RS in their studies. In these three studies, factor analysis was used as the statistical method to test the various reported scores. The authors Fraley et al., (2011) used the means, standard deviations, skewness, Cronbach’s Alpha and intercorrelations among various ECR-RS scores in their study which described variability among the adult attachment styles. The article had two studies using a multiple culture sample using 23,000 participants in study 1 and 388 participants in study 2. The majority of participants were women;
the average age in study 1 was 31.35 and in study 2, 22.59. Study 1 consisted of Americans (14,781), British (1,852), and Canadians (1,232). Study 2, consisted of Caucasian (72%), Chinese American (8.5%), and Latino (4.1%). The following will summarize each instrument used to measure attachments, with a brief description of each study, and then, in conclusion, the author’s justification in selecting the ECR-RS for this study.

**Experiences in Close Relationships-Revised Structures (ECR-RS).** The (ECR-RS) measures adult attachment orientations across multiple relationships from parental figures, romantic partners, and close friends. This self-report scale was designed to look closely at anxiety and avoidance across four distinct relationships mentioned (Fraley, et al, 2011). This tool is comprised of 36-item questions using a Likert rating on a 7-point scale ranging from strongly disagree (1) to strongly agree (7) on the other end of the point system. The first set of 9 questions pertain to the relationship with mother or mother-like figure with questions if this person is easy to turn to, or if this person is easy to talk are two examples in this questionnaire. The second address the relationship as identified to reflect the father or father-like figure. The third set of questions target the dating or marital partner. The last sets of questions are geared to describe the best friend relationship. All questions are identical, but each address those four distinct relationships separately (for an example, see Appendix A). Fraley, et al., (2011) believed these four relationship domains should include measuring attachment styles related to an individual’s attachment style to God, siblings, teachers, counselors, and pets in future attachment relationships adding to the original questionnaire. At this time, there is no updated version of the ECR-RS to include any of the above mentioned additional domains.

Included in this online survey are seven questions pertaining to the participants demographic information such as gender, current relationship status, the length of the romantic
relationship, country of residence, ethnicity, and if this assessment had been taken previously (for an example, see Appendix B). The authors provide scoring instructions using the ECR-RS in their article which is a great relief for others to replicate their work in attachment research (Fraley et al, 2011).

**Adult Attachment Interview (AAI).** In Table 2, Adult Attachment Interview (AAI) assessment tool was developed by George, Kaplan, & Main, (1985) at The University of California at Berkley as mentioned by Daniel Sonkin (2005). This scale was developed to capture a parents’ mental representation of attachment from their childhood experiences while predicting parents’ responsiveness to their infant’s attachment signals taken from Ainsworth’s Strange Situation work (Goldwyn et al., 2011; Ijzendoorn et al., 1995). It is important to point out that using this instrument is costly, intensive, extensive, as a coder is required to transcribe, code, and score the answers from the participants (Sonkin, 2005).

The authors used Cronbach’s Alpha statistical method to estimate the inferred maternal and paternal experiences. Goldwyn et al., (2011) reported that the AAI has volumes of published studies to support the instrument in attachment research. In addition, Ravitz et al., (2010) reported the reliability and validity of the AAI with excellent psychometric properties. Haydon et al., (2011) administered two studies in their research. The first study used the AAI in studying 73 heterosexual couples and the development of dating relationships. This was a multiple culture sample as 79% of the participants were Caucasian; however, the authors failed to identify the racial identities of the remaining 21% of the sample (see Table 2).

**Adult Attachment Scale (AAS).** Another attachment instrument found in Table 2, was developed by Collins & Reed (1990) to describe feelings about romantic relationships. The AAS is a self-report questionnaire which includes an 18-item questions based on a Likert rating on a
5-point scale ranging from “not at all characteristic of me” (1) to “very characteristic of me” (5) on the other end of the point system. In Table 2, an article by Tasso, Brown, Griffo, & Maxwell (2012) used the AAS in a multiple culture sample of 174 men mandated to attend the twenty-six weeks of the domestic violence perpetrator program. The participants consisted of 77.8% Caucasian, 9.1% Latino, 6.8% African American, 3.4% Asian, 0.6% Indian, and 2.3% other. Using the information from this study, the authors explored the validity of the scale using factor analysis and reported in their conclusion that the AAS failed to replicate significance after several variations of the factor analysis conducted. Therefore, it lacked the validation of factor structure using the AAS scale because of the inconsistent responses from these self-identified violent men (Tasso et al., 2012).

**Attachment Question-Sets (AQS).** This scale was developed by Waters & Deane (1985) and consisted of 90-item cards describing specific behavioral characteristics of children (van Ijzendoorn et al., 1995). A broad range of secure base and affective response in social referencing are represented in this scale (van Bakel & Riksen-Wallrawen, 2004). Table 2 included an article by Van Bakel & Riksen-Wallrawen (2004) these researchers investigated this scale using Cronbach’s Alpha statistical method to prove satisfactory results for internal consistency. In this study, the authors used a sample of 129 Dutch infants and their caregivers from the Netherlands. The AQS was translated into the Dutch language and transcribed by two certified and experienced coders. This scale requires a trained observer to sort the cards which correspond to the degree the child will exhibit. In this study, each item of the child’s behaviors was scored at home and in a public setting in multiple meetings with their caregivers by authors, Van Bakel & Riksen-Wallrawen, in 2004 (see Table 2).
**Children’s Report of Parental Behavior Inventory.** This attachment instrument was developed by Schaefer (1965) and measures children’s perceptions, or adjustments, to their parent’s behaviors. The CRPBI consists of 10-items developed for each of the 26 concepts measured. These concepts seek to investigate the parent-child relationship. These concepts are guided by a conceptual model pertaining to love versus hostility and autonomy verses control as viewed by the child (Schaefer, 1965). Researchers Schwarz, et al., (1985) used factor analysis to check the validity of this scale which reported a moderate internal consistency of the CRPBI. This scale did not list if the participants used were from a single or multiple culture samples which is problematic when investigating the effectiveness of this scale measuring adult attachment cross-culturally (see Table 2).

**Experiences in Close Relationship (ECR).** The ECR was developed by Brennan, Clark, and Shaver in 1998 and was derived from the early work of Hazen and Shafer (1987). In Table 2, Parker, Johnson, & Ketring (2011) used factor analysis to prove the significance of the instrument. A multiple culture sample was examined which included a Latino population. The authors used the ECR which is a 36-item self-report to measure two main subscales of attachment patterns, avoidance, and anxiety. A sample of the items included: 1) if the person was somewhat comfortable; 2) if relationships evolved rather easy; 3) or, if they felt that others are reluctant to begin a close relationship (Fraley & Shaver, 2000). In these questions, the items reflected upon one’s thoughts about self and the personal thoughts and views of their partners in romantic relationships. The ECR is followed by revisions to include ECR-R and ECR-RS for those individuals interested in searching and selecting which appropriate measuring tools are better suited for each researcher.
Experiences in Close Relationship Revised (ECR). The ECR-R was developed by Fraley, Waller, and Brennan (2000) as a revised version from Brennan, et al (1998). This measuring instrument consisted of 36-item self-report scale. Similar to the ECR, this model measures two main subscales of attachment patterns, avoidance and anxiety. Both the ECR and ECR-R were originally designed to assess individual differences as related to adult romantic relationships. The revised version of the ECR, ECR-R has significant reliability and validity in numerous studies using various single cultures. Therefore, the newer version of this scale is the selected instrument used in this study. (Wongpakaran et al., 2011; Ehrenthal, et al., 2009; Tsagarakis et al., 2007; Fairchild & Finney, 2006).

In Table 2, a study by Tsagarakis et al., (2007) used Cronbach’s Alpha coefficients, factor analysis, and test/retest to prove the significance of the ECR scale in their study. In this study, the single culture investigated was a Greek population. The ECR-R was translated into Greek and the authors reported this scale had adequate psychometric properties. Therefore, for this study, examining the newer versions of the scale would give us a general picture to draw from the cross-cultural validation of the ECR-RS.

Relationship Scales Questionnaire (RSQ). The RSQ is an assessment instrument adapted from the original work of Hazan and Shafer (1987) by Griffin & Bartholomew (1994). The RSQ is a self-report instrument used to assess relationship styles in adult attachment. The 30-item inventory of short statements places the original three styles into a four-category framework (Kurdek, 2002). The RSQ uses a Likert rating on a 5-point scale ranging from not at all (1) to very much like me (5). A few examples of these personal questions range from if you depend on other people to if you feel that a history of your romantic partners wanted you to disclose more in the relationship. The highest of these scores are considered accurate to describe
an individual’s attachment category, but most participants responded to having overlapping
responses into more than one category (Kilmann, 1999). These 30 statements require an
individual to rate the best to describe their feelings, referring to close relationships.

In Table 2 and under this scale, a study by Backstrom & Holmes, (2001) used a single
culture sample of 515 Swedish college students. The authors investigated the psychometric
properties using Cronbach’s Alpha and factor analysis statistical methods. According to these
researchers, both statistical methods reported a significant validity of the RSQ. Further reading
of the scoring of this measure is found in an article by Kurdek (2002).

Conclusion/ ECR-RS

The reliability and validity of an instrument is a challenge for most researchers in
measuring, testing, and observing specific constructs in any given study. The ECR-RS is the
selected scale for this study for several reasons. It is the newest version of the ECR scale which
has been used in single and multiple culture samples as previously mentioned and lends support
to the cross-cultural validity of scale. An article by Fraley et al., (2011) reported using
Cronbach’s Alpha, factor analysis, and test/retest statistical methods in various studies proving
statistical significance. In addition, one of the researchers, R. Chris Fraley, professor at
University of Illinois, offers updated information on attachment research, and scoring
instructions on widely used scales which is available and valuable for other researchers through
his website.

It was decided that the instrument to use for this study is the ECR-RS because it has been
used in conducting multiple culture samples and has an established evidence of validity. The
AAS by Collins & Reed (1999) failed statistical significance which is problematic and therefore,
was not selected as the attachment instrument for this study. The MAD by Rastogi & Wampler
(1999) was used one time and developed by the authors and showed promise if used in future studies. The other instrument which was promising is the AAI by George et al., (1985). However, this instrument was not selected because it is costly and requires a 1-hour interview.

The CRPBI by Schaefer (1965) used a factor analysis method which was acceptable. However, this scale is geared more towards children’s perspectives and inappropriate for this study using an adult sample.

The attachment framework is of European origin and early attachment instruments were designed to identify attachment styles using participants of the same culture (van IJzendoorn & Sagi, 1999). It is erroneous to believe that this method is valid when measuring students’ adult attachment styles that have originated from a different cultural context. Individuals of Mexican American descent have distinct differences and similarities from other Hispanics. However, as Rastogi & Wampler (1999) stated, researchers must not assume using individuals of similar beliefs and customs as a sufficient and appropriate representation of the culture.

According to Fraley et al., (2011) most research in adult attachment proposed that internal working models are general and trait-like in romantic relationships. This follows the original assumption established by John Bowlby which proposed this working template guides expectations and behaviors throughout the lifespan (Bowlby, 1982). Current attachment research has evolved to suggest this identified working model is relationship specific (Fraley et al., 2011). Therefore, multiple domains of specific relationships should be examined across various relational contexts.
Chapter III

Methods

Attachment researchers have dedicated their work to understanding and enhancing the attachment framework and it is problematic that previous research has not encompassed many Hispanic populations, especially Mexican American samples in adult relationships. There are a limited number of instruments which have included this population in attachment studies. The purpose of this study is to compare young adults’ attachment styles among a Hispanic and non-Hispanic sample. The information from the participants in this study was collected from undergraduates attending a university located in a southwestern state which borders Mexico; thereby it is assumed that the Hispanics are from Mexican descent since the majority of its students were residents from that particular state.

The second overall goal of this study was to examine the factor structure of the ECR-RS instrument tool by conducting a series of exploratory factor analysis. The ECR-RS has been used to evaluate adult attachment styles of various populations around the world, but is limited in using more Hispanics, precisely a Mexican American group.

Research Design

This validation design will examine the factor structure of the ECR-RS within a college sample of Hispanic and non-Hispanics college students to assess if it is equivalent with prior validation studies of the ECR-RS (Donbaek & Elklit, 2014; Parker, Johnson & Ketring 2011). The participants will answer questions pertaining to four relationship domains which will include the mother-like figure, father-like figure, spouse/romantic partner, or best friend. Similarities or differences in relationship styles among the participants will be examined. A principal components factor analysis will be performed to test the validity of the constructs and adequate
model fit. The results will suggest if this scale maintains acceptable properties while assessing an evenly distributed range of trait scores.

**Participants**

Participants were undergraduate students enrolled in a private liberal arts college in the southwest. All students in selected core curriculum classes were invited to participate in the survey; the demographic form will identify ethnicity to allow for comparisons between Hispanic and non-Hispanic students. It was estimated that the study would recruit 350 participants. The solicitation and distribution of the survey were made available for those students enrolled for the fall 2015 and spring 2016 semesters. The informed consent and cover letter for participants, and ECR-RS survey for the interested subjects can be found in Appendix C and Appendix A.

For this project, questions surrounding the participants demographic information such as gender, current relationship status, the length of the romantic relationship, country of residence, ethnicity, economic status, age, gender, if this assessment had been taken previously, and if the participant is first, second, third, or fourth generation born in the United States are included (see Appendix B). The researcher provided each instructor teaching these core classes with a brief description of the study and an attached announcement to forward to their students enrolled in the course (see Appendix D). The IRB application and approval stamp can be found in Appendix E and the researcher’s curriculum vita is in Appendix F.

A total of 199 responses were received and the adult relationship styles of these undergraduate students were compared. Researchers, Wongpakaran, Wongpakaran, and Wannarit (2011) calculated a sample size by using a formula suggested by Comrey and Lee (1992). These authors stated a sample size of 328 is appropriate when using factor analysis. Originally, the targeted sample size was 350 in order to ensure a sufficient collection of data for the analysis.
The students enrolled in core curriculum courses were selected to pool an equal number of males and females in the study. Both male and female students were invited to participate voluntarily.

According to a report from the office of provost at this private university in 2013, the student enrollment in the Humanities and Social Sciences was 1,103; the Science, Engineering, and Technology was 813; and in the School of Business was 475. Thus, a combined total of 2,391 undergraduate students in these three different departments received the invitation to be surveyed. Additional statistical information gathered in 2013 included 1,050 male and 1,343 female students; Hispanics consist of 1,719 and non-Hispanics is 336. There are clear differences in enrollment, gender, and ethnicity of undergraduate students at this university.

**Procedures**

The researcher contacted professors in core curriculum courses. The data collected from volunteers who agreed to participate in the study. The description of the study, including tasks to be included, potential risks and benefits, and the rights of the students were covered in an email to the professors as a form of solicitation prior to the study and was provided online before students had access to the survey itself. The survey was available for a period of four weeks initially. Additional time was needed to reach the desired participants, so the survey was extended through the 2016 Spring Semester. The on-line survey was administered through Qualtrics Survey Software titled: “Cross-Cultural Validation of Attachment Styles Among Undergraduate College Students”. Once collected, the data were analyzed using inferential statistics. An exploratory factor analysis of the data collected compared the construct validity of the ECR-RS across the cultural groups of Hispanic and Non-Hispanic undergraduate students.

The ECR-RS questionnaire was conducted online and the participants' information was anonymous. The survey included questions pertaining to the participants’ demographic
information. Electronic records were maintained in the researchers’ personal computer, which is password protected. The researcher’s personal computer was locked both in home office and in a file cabinet when not in use. The electronic records of the student’s responses will be securely stored for five years and then destroyed, according to federal regulations, upon completion of the project. There was no cost to participants and completing the survey took approximately 15-20 minutes. The participation of the students for this study is voluntary and no extra credit or monetary incentives were offered.

**Measuring Instrument**

The Experiences in Close Relationships-Revised Structures (ECR-RS) was the instrument used to measure and compare attachment styles among the participants for this study (see Appendix A). Fraley, Heffernan, Vicary, & Brumbaugh, (2011) modified the ECR-RS from the ECR previously developed by Brennan, Clark, and Shaver in 1998 (Fraley & Shaver, 2000). This assessment instrument was designed to assess adult attachment across four kinds of distinct, but separate relationships of mother-like figure, father-like figure, spouse/romantic partner, and best friend. The survey was available online and the scoring is computed for educational purposes for the participant upon the completion of the survey. The results taken from the scores of the online survey includes a brief explanation of the four attachment styles (secure attachment, avoidant attachment, fearful attachment, and anxious attachment. This self-report scale has 9-items in each of the four relationship domains, a total of 36-items using a Likert 7-point scale ranging from (1) strongly disagree to (7) strongly agree of the point system. The first sets of 9 questions pertain to the relationship with mother or mother-like figure. The second set of questions address the relationship to reflect the father or father-like figure. The third set of
questions target the spouse or romantic partner and the last set of questions are geared to describe the best friend relationship (Fraley et al., 2011).

The ECR-RS was scored in two dimensions, anxiety and avoidance for each domain of the relationship structures (Fraley et al., 2011). The scores are then averaged across the four domains to create an overall anxiety and avoidance score. These were plotted on a matrix when the online survey is used and operated by its’ author to identify the relationship styles of secure, avoidant, anxious, and fearful attachment (Fraley et al., 2011). The between group comparison compared both overall relationship scores and domain scores.

**Statistics**

The participants in this study consisted of 199 undergraduate students recruited from introductory core curriculum classes in a private university in the southwest are in the United States. Similarities or differences in relationship styles among the participants were examined. The tests involved comparing the factor structures and internal consistencies of the sets of items in the two groups. An exploratory factor analysis was performed to test the validity of the constructs and adequate model fit. An exploratory factor analysis (EFA) was conducted to determine the consistency of factors within the Experiences in Close Relationships-Revised Structures (Fraley, et al., 2011). This analysis compared the two-factor model found in the validation study of the ECR-RS (Donbaek & Elklit, 2014; Parker et al., 2011) with the factor solution of Hispanic and Non-Hispanic participants in each of the four relationship domains, Mother, Father, Romantic Partner or Spouse, and Best Friend. Eight factor analyses assessed the four relationship domains, attachment with mother, father, romantic partner, and friend, and the two ethnic groups, Hispanic and non-Hispanic. The examination for the distributions of the
variables were conducted using the SPSS software. The results suggested that this scale maintains acceptable properties while assessing an evenly distributed range of trait scores.

The researcher used Chi-Square to determine the legitimacy of combining the samples and to determine if the frequencies of the samples were similar (Tabachnik & Fidell, 2001). A chi-square measure of goodness of fit evaluated the adequacy of each two-factor solution for the four domains across two samples.

The Chi-square test of goodness of fit indicated that the two-factor solution fits the data for both Hispanic and non-Hispanic populations, with the exception of one factor, the best friend relationship domain. This indicates that for most relationships the two-factor model is equivalent for both Hispanic and non-Hispanic populations. In the best friend relationship domain, the two-factor solution was adequate for the Hispanic sample, but not for the non-Hispanic sample.
Chapter IV

Results

The purpose of this study was to conduct a cross-cultural validation of a common instrument for assessing adult attachment, the Experiences in Close Relationships-Revised Structure (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011). The two strategies for conducting a cross-cultural validation is factor analysis and comparing attachment among Hispanic and non-Hispanic undergraduate students. A common assumption is that acculturated minority groups do not differ from the assessment norms typically developed with majority groups, although many aspects of their life experiences differ (Padilla & Borsato, 2008). There is literature to suggest that acculturated Hispanic persons retain aspects of their culture seen in the family dynamic, specifically an important value of family loyalty known as familialism (Flores & Carey, 2000).

The central research question guiding this study: \textit{How well does the obtained factor solution for Hispanic and Non-Hispanic participants fit the expected factor structure derived in previous validation studies?} This study used factor analysis to compare whether two groups, Hispanic and non-Hispanic students, had similar or different patterns of factor loadings. Maximum likelihood extraction in exploratory factor analysis can provide a preliminary comparison of the factor solutions between groups if confirmatory factor analysis is not available (Barton & Kotecha, 2017; Tabachnick & Fidell, 2001).

Demographics of Participants

Participants consisted of 199 undergraduate students recruited from introductory core curriculum classes in a liberal and private university in the southwest. Table 3 shows that the
majority of participants in this study were Hispanics with Hispanic females between the ages of 18-25 making up the larger group.

Table 3

Descriptive Statistics Gender, Age, & Ethnicity of Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Hispanic</th>
<th>Non-Hispanic</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18-25</td>
<td>42 21.1%</td>
<td>15 7.5%</td>
<td>57 28.6%</td>
</tr>
<tr>
<td></td>
<td>over 26</td>
<td>3 1.5%</td>
<td>2 1.0%</td>
<td>5 2.5%</td>
</tr>
<tr>
<td>Males by Ethnicity</td>
<td>45 22.6%</td>
<td>17 8.5%</td>
<td>62 31.1%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18-25</td>
<td>108 54.3%</td>
<td>25 12.6%</td>
<td>133 66.8%</td>
</tr>
<tr>
<td></td>
<td>over 26</td>
<td>3 1.5%</td>
<td>1 0.5%</td>
<td>4 2.0%</td>
</tr>
<tr>
<td>Females by Ethnicity</td>
<td>111 55.8%</td>
<td>26 13.1%</td>
<td>137 68.8%</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>156 78.4%</td>
<td>43 21.6%</td>
<td>199 100%</td>
</tr>
</tbody>
</table>

Table 4 displays a comparison between Hispanic and Non-Hispanic populations by place of birth. Many Hispanics (68%) and non-Hispanics (20.8%) reported they were born in the U.S. (see Table 4) and indicated that they were in a romantic relationship (see Table 6). Most of the Hispanic subjects indicated their families were first- or second-generation citizens, while most non-Hispanic subjects indicated their families were well over 5 generations of U.S. citizens (see Table 5). This suggests that the two groups are expected to have different levels of acculturation, making a comparison between these groups with different life experiences appropriate for factor analysis.
Table 4

Acculturation, Place of Birth, by Gender and Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Hispanic</th>
<th></th>
<th></th>
<th>Non-Hispanic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>%</td>
<td>Male</td>
<td>Female</td>
<td>%</td>
</tr>
<tr>
<td>US Born</td>
<td>41</td>
<td>94</td>
<td>68.5</td>
<td>15</td>
<td>26</td>
<td>20.8</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>4</td>
<td>15</td>
<td>9.6</td>
<td>2</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>109</td>
<td>78.1</td>
<td>17</td>
<td>26</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Table 5

Acculturation, Generation of Immigration, by Gender and Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Hispanic</th>
<th></th>
<th></th>
<th>Non-Hispanic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>%</td>
<td>Male</td>
<td>Female</td>
<td>%</td>
</tr>
<tr>
<td>1st generation</td>
<td>9</td>
<td>22</td>
<td>18.9</td>
<td>1</td>
<td>0</td>
<td>0.6</td>
</tr>
<tr>
<td>2nd generation</td>
<td>11</td>
<td>22</td>
<td>20.1</td>
<td>2</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>3rd generation</td>
<td>9</td>
<td>15</td>
<td>14.6</td>
<td>4</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>4th generation</td>
<td>4</td>
<td>6</td>
<td>6.1</td>
<td>1</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>5th or More</td>
<td>6</td>
<td>21</td>
<td>16.5</td>
<td>6</td>
<td>16</td>
<td>13.4</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>86</td>
<td>76.2</td>
<td>14</td>
<td>25</td>
<td>23.7</td>
</tr>
</tbody>
</table>

*Note.* Majority of group; Hispanic females 1st & 2nd generations.

Table 6 demonstrates the relationship status reported by the participants. The focus of the study was adult attachment styles in close personal relationships. Approximately half of the participants in this study reported that they were in a romantic relationship (55.3%) while the other participants (42.8%) reported they were not in a romantic relationship.
Table 6

*Relationship Status, by Gender and Ethnicity*

<table>
<thead>
<tr>
<th></th>
<th>Hispanic</th>
<th></th>
<th>Non-Hispanic</th>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>%</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>In relationship</td>
<td>18</td>
<td>70</td>
<td>44.2</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Not in relationship</td>
<td>27</td>
<td>41</td>
<td>32.7</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

*Note:* Majority of group; Hispanic females N = 70 in romantic relationship.

The majority of the students reported their annual income in the $50,000 to $99,000 category (33.8%) while the social economic status of the second highest income level reported by the students was the $20,000 to 49,999 category (29%; see Table 7).

Table 7

*Self-reported Economic Status, by Ethnicity and Gender*

<table>
<thead>
<tr>
<th></th>
<th>Hispanic</th>
<th></th>
<th>Non-Hispanic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>%</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Less Than $20,000 Annually</td>
<td>12</td>
<td>16</td>
<td>15.3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Between $20,000 to $49,999</td>
<td>15</td>
<td>32</td>
<td>25.7</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Between $50,000 to $99,999</td>
<td>11</td>
<td>33</td>
<td>24.0</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>5</td>
<td>19</td>
<td>13.1</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>
Description of Major Variables

The Experiences in Close Relationships-Revised Structure (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011) scale provide the data for this study. Table 8 summarizes the mean, standard deviation, skew and kurtosis of each item of the ECR-RS. The skewness values are acceptable below an absolute value of 2, while kurtosis values are considered acceptable if they do not exceed an absolute value of 7 (Gorsuch, 1997). In Table 8, the distribution of the items on the ECR-RS indicates that the majority of the items for both the anxiety and the avoidance subscales were within acceptable parameters for skewness and kurtosis, with two exceptions in the area of skewness values above an absolute value of 2. Skewness for items #8 (2.530), “I’m afraid that this person may abandon me”, and #9 (2.382), “I worry this person won’t care about me as much as I care about him or her” both found in the mother-like figure relationship domain were both above the acceptable absolute of 2. According to an article by Parker et al., (2011), they reported in their findings that an item (item 10) exceeded the acceptable values for skewness. These researchers did not include that particular item in the primary analysis of their study. Therefore, the skewness values which were not within the acceptable parameters are reported in Table 8, but were not excluded from the primary analysis in this study.
### Table 8

**Item Means, Standard Deviations, Skewness, and Kurtosis for the Experiences in Close Relationship-**Revised Structures, for Mother- and Father-like Figures

<table>
<thead>
<tr>
<th>Item</th>
<th>Relationship</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>It helps to turn to this person in times of need.</td>
<td>Mother</td>
<td>5.91</td>
<td>1.61</td>
<td>-1.703</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>5.09</td>
<td>2.03</td>
<td>-.917</td>
</tr>
<tr>
<td>(2)</td>
<td>I usually discuss my problems and concerns with this person.</td>
<td>Mother</td>
<td>5.36</td>
<td>1.79</td>
<td>-.986</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>4.40</td>
<td>2.10</td>
<td>-.303</td>
</tr>
<tr>
<td>(3)</td>
<td>I talk things over with this person.</td>
<td>Mother</td>
<td>5.60</td>
<td>1.69</td>
<td>-1.240</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>4.53</td>
<td>2.95</td>
<td>-.394</td>
</tr>
<tr>
<td>(4)</td>
<td>I find it easy to depend on this person.</td>
<td>Mother</td>
<td>5.81</td>
<td>1.85</td>
<td>-1.548</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>5.22</td>
<td>2.09</td>
<td>-.939</td>
</tr>
<tr>
<td>(5)</td>
<td>I don’t feel comfortable opening up to this person.</td>
<td>Mother</td>
<td>2.67</td>
<td>1.82</td>
<td>.903</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>3.41</td>
<td>2.05</td>
<td>.290</td>
</tr>
<tr>
<td>(6)</td>
<td>I prefer not to show this person how I feel deep down inside.</td>
<td>Mother</td>
<td>3.23</td>
<td>2.07</td>
<td>.421</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>3.70</td>
<td>2.14</td>
<td>.051</td>
</tr>
<tr>
<td>(7)</td>
<td>I often worry this person doesn’t really care about me.</td>
<td>Mother</td>
<td>1.78</td>
<td>1.53</td>
<td>1.889</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>2.25</td>
<td>1.86</td>
<td>1.314</td>
</tr>
<tr>
<td>(8)</td>
<td>I’m afraid this person may abandon me.</td>
<td>Mother</td>
<td>1.60</td>
<td>1.40</td>
<td>2.530</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>2.10</td>
<td>1.78</td>
<td>1.448</td>
</tr>
<tr>
<td>(9)</td>
<td>I worry this person won’t care about me as much as I care about him or her.</td>
<td>Mother</td>
<td>1.64</td>
<td>1.44</td>
<td>2.382</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father</td>
<td>2.02</td>
<td>1.70</td>
<td>1.476</td>
</tr>
</tbody>
</table>

*Note.* Items #8 (2.530) and #9 (2.382) for Mother-like figure, the skewness values were not acceptable.

The distribution of the items on the ECR-RS indicates that the majority of the items for both the anxiety and the avoidance subscales were within acceptable parameters for skewness and kurtosis (see Table 9).
### Table 9

*Item Means, Standard Deviations, Skewness, and Kurtosis for the Experiences in Close Relationship-Revised Structures, for Partner or Spouse- and Best Friend-like Figures*

<table>
<thead>
<tr>
<th>Item</th>
<th>Relationship</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>It helps to turn to this person in times of need.</td>
<td>Partner</td>
<td>5.53</td>
<td>1.65</td>
<td>-.993</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>6.10</td>
<td>1.25</td>
<td>-1.665</td>
</tr>
<tr>
<td>(2)</td>
<td>I usually discuss my problems and concerns with this person.</td>
<td>Partner</td>
<td>5.48</td>
<td>1.67</td>
<td>-.919</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>5.96</td>
<td>1.34</td>
<td>-1.480</td>
</tr>
<tr>
<td>(3)</td>
<td>I talk things over with this person.</td>
<td>Partner</td>
<td>5.58</td>
<td>1.65</td>
<td>-1.051</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>5.98</td>
<td>1.35</td>
<td>-1.501</td>
</tr>
<tr>
<td>(4)</td>
<td>I find it easy to depend on this person.</td>
<td>Partner</td>
<td>5.40</td>
<td>1.75</td>
<td>-.950</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>5.93</td>
<td>1.33</td>
<td>-1.379</td>
</tr>
<tr>
<td>(5)</td>
<td>I don’t feel comfortable opening up to this person.</td>
<td>Partner</td>
<td>2.52</td>
<td>1.64</td>
<td>.714</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>2.20</td>
<td>1.54</td>
<td>1.402</td>
</tr>
<tr>
<td>(6)</td>
<td>I prefer not to show this person how I feel deep down inside.</td>
<td>Partner</td>
<td>2.77</td>
<td>1.77</td>
<td>.574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>2.46</td>
<td>1.65</td>
<td>.938</td>
</tr>
<tr>
<td>(7)</td>
<td>I often worry this person doesn’t really care about me.</td>
<td>Partner</td>
<td>2.89</td>
<td>1.85</td>
<td>.575</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>2.31</td>
<td>1.75</td>
<td>1.231</td>
</tr>
<tr>
<td>(8)</td>
<td>I’m afraid this person may abandon me.</td>
<td>Partner</td>
<td>3.16</td>
<td>1.91</td>
<td>.430</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>2.36</td>
<td>1.76</td>
<td>1.198</td>
</tr>
<tr>
<td>(9)</td>
<td>I worry this person won’t care about me as much as I care about him or her.</td>
<td>Partner</td>
<td>3.20</td>
<td>1.91</td>
<td>.394</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friend</td>
<td>2.49</td>
<td>1.85</td>
<td>.970</td>
</tr>
</tbody>
</table>

Differences in skewness among items suggests the possibility of curvilinearity for some pairs of items, which would violate the assumptions of linearity necessary for factor analysis. Examination of all 1260 pairwise scatterplots for the possibility of curvilinearity is unfeasible, so pairwise scatterplots of items 1 and 2 in the mother-like figure, father-like figure, romantic partner/spouse, and best friend relationship domains were examined, as recommended by
Tabachnick & Fidell (2001). Curvilinear relationships between items is evaluated visually for a U-shaped pattern of plots. Inspection of the pairwise scatterplots indicates that curvilinearity is present.

Figure 1. Spot Check for Linearity, Mother-Like Figure, Father-Like Figure, Romantic Partner/Spouse, Best Friend
The examination for the distributions of the variables were conducted through SPSS. In the mother-like figure, father-like figure, romantic partner/spouse, and best friend items #1, “mother discuss problems” and #2, “mother times of need” were paired and results showed some of the variables were negatively skewed (see Figure 1).

**Cross-Cultural Validity, Factor Analysis**

A principal components factor analysis with maximum likelihood extraction was conducted to determine the consistency of factors within the Experiences in Close Relationships-Revised Structures (Fraley, et al., 2011). This analysis compared the two-factor model found in the validation study of the ECR-RS (Donbaek & Elklit, 2014; Parker et al., 2011) with the factor solution of Hispanic and Non-Hispanic participants in each of the four relationship domains, Mother, Father, Romantic Partner or Spouse, and Best Friend. Eight factor analyses assessed the four relationship domains, attachment with mother, father, romantic partner, and friend, and the two ethnic groups, Hispanic and non-Hispanic.

Maximum likelihood extraction uses Chi-square to evaluate the goodness of fit of the two-factor solution as found in the ECR-RS validation studies (Donbaek & Elklit, 2004; Parker et al., 2011) for the two samples in this study. Table 10 shows the results of the Chi-Square tests of homogeneity for four relationship domains and ethnicity.

A significant Chi-Square indicates that the two factor solution is sufficient. Table 10 displays that the two-factor solution fits the data for both the Hispanic and non-Hispanic populations, with the exception of one factor, the best friend category. This indicates that the ECR-RS measures equivalent factors in both cultural groups, evidence for a cross-cultural validation of this instrument. This subcategory indicated that the two-factor structure was adequate for the Hispanic sample, but not adequate for the non-Hispanic sample.
Table 10

*Test for Homogeneity: Chi-Square with Significance*

<table>
<thead>
<tr>
<th>Relationship Domain</th>
<th>Ethnicity</th>
<th>Chi-square</th>
<th>Significance</th>
<th>Reject Null</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>Non-Hispanic (1)</td>
<td>63.70 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Hispanic (2)</td>
<td>63.850 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td>Father</td>
<td>Non-Hispanic (1)</td>
<td>106.706 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Hispanic (2)</td>
<td>127.855 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td>Spouse or Romantic Partner</td>
<td>Non-Hispanic (1)</td>
<td>63.887 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Hispanic (2)</td>
<td>112.637 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
<tr>
<td>Friend</td>
<td>Non-Hispanic (1)</td>
<td>34.704 (df=19)</td>
<td>.015</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Hispanic (2)</td>
<td>89.275 (df=19)</td>
<td>.000</td>
<td>Y</td>
</tr>
</tbody>
</table>

*Note:* The two factor model was not adequate to explain the co-variances among the items in the best friend relationship domain (.015).

Principal components factor analysis with maximum likelihood extraction can provide an exploratory test of equivalence between samples (Barton & Kotecha, 2017; Tabachnick and Fidell, 2001; SPSS support, 2017). According to Tabachnick and Fidell (2001) using exploratory factor analysis, one can use maximum likelihood extraction to provide a preliminary comparison of the factor solutions between the groups if confirmatory factor analysis is not available. Maximum likelihood extraction uses Chi-square to evaluate the goodness of fit of factor solutions. A significant Chi-Square indicates that the two factor solution is sufficient. If the results show that the two-factor solution is adequate for one group, but not for the other, the validity of the scale for use with a Hispanic population can be questioned.
This study assessed the goodness of fit of the two-factor solution as found in the ECR-RS validation studies (Donbaek & Elklit, 2014; Parker et al., 2011) for the two samples in this study. Table 10 shows that the two-factor solution fits the data for both the Hispanic and non-Hispanic populations, with exception of one factor, the best friend relationship domain. This indicates that the ECR-RS measures equivalent factors in both cultural groups, evidence for a cross-cultural validation of this instrument.

Tables 11 through 14 summarize the factor loadings of items on the two specified factors for each of the eight sets and the varimax rotation for each relationship domain. Size of the loadings are approximately equivalent in each relationship domain across ethnicity. However, in the domain of the Non-Hispanic mother-like figure found in Table 11, items 5 & 6 did not have a factor loading of 0.45 or 20% of variance between items and factors. In Table 12, and also in the domain of the father-like figure for both Hispanic and Non-Hispanic groups, items 5 & 6 did not have a factor loading of 0.45 or 20% of variance between items and factors. In Table 13, in the domain of the spouse or romantic partner, all of the items were identical in both ethnic groups having factor loading of 0.45 or 20% of the variance between items and factors. Lastly, in the domain of best friend, all of the items were identical in both ethnic groups having factor loading of 0.45 or 20% of the variance between items and factors (see Table 14). Therefore, when comparing the responses of the participants of Hispanics and non-Hispanics, in all four tables, the mother-like figures and father-like figures had similar responses. While the responses from the participants from the spouse and best friend domains, also had similar responses.
Table 11

*Mother – Rotated Factor Loadings, Varimax Rotation, by Ethnicity*

<table>
<thead>
<tr>
<th>Mother Item</th>
<th>Hispanic Factor Loadings</th>
<th>Non-Hispanic Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>(1) It helps to turn to this person in times of need.</td>
<td>0.836</td>
<td>--</td>
</tr>
<tr>
<td>(2) I usually discuss my problems and concerns with this person.</td>
<td>0.896</td>
<td>--</td>
</tr>
<tr>
<td>(3) I talk things over with this person.</td>
<td>0.878</td>
<td>--</td>
</tr>
<tr>
<td>(4) I find it easy to depend on this person.</td>
<td>0.790</td>
<td>--</td>
</tr>
<tr>
<td>(5) I don’t feel comfortable opening up to this person.</td>
<td>--</td>
<td>0.488</td>
</tr>
<tr>
<td>(6) I prefer not to show this person how I feel deep down inside.</td>
<td>--</td>
<td>0.524</td>
</tr>
<tr>
<td>(7) I often worry this person doesn’t really care about me.</td>
<td>--</td>
<td>0.849</td>
</tr>
<tr>
<td>(8) I’m afraid this person may abandon me.</td>
<td>--</td>
<td>0.873</td>
</tr>
<tr>
<td>(9) I worry this person won’t care about me as much as I care about him or her.</td>
<td>--</td>
<td>0.915</td>
</tr>
</tbody>
</table>

*Note:* Only factor loadings greater than 0.45 are listed in table for ease of interpretation.
Table 12

Father – Rotated Factor Loadings, Varimax Rotation, by Ethnicity

<table>
<thead>
<tr>
<th>Father Item</th>
<th>Factor Loadings</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) It helps to turn to this person in times of need.</td>
<td>0.822</td>
<td>--</td>
<td>0.855</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(2) I usually discuss my problems and concerns with this person.</td>
<td>0.909</td>
<td>--</td>
<td>0.972</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(3) I talk things over with this person.</td>
<td>0.913</td>
<td>--</td>
<td>0.928</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(4) I find it easy to depend on this person.</td>
<td>0.709</td>
<td>--</td>
<td>0.761</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(5) I don’t feel comfortable opening up to this person.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(6) I prefer not to show this person how I feel deep down inside.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(7) I often worry this person doesn’t really care about me.</td>
<td>--</td>
<td>0.852</td>
<td>--</td>
<td>0.732</td>
<td></td>
</tr>
<tr>
<td>(8) I’m afraid this person may abandon me.</td>
<td>--</td>
<td>0.809</td>
<td>--</td>
<td>0.890</td>
<td></td>
</tr>
<tr>
<td>(9) I worry this person won’t care about me as much as I care about him or her.</td>
<td>--</td>
<td>0.812</td>
<td>--</td>
<td>0.916</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* only factor loadings greater than 0.45 are listed in table for ease of interpretation.
Table 13

*Spouse or Romantic Partner - Rotated Factor Loadings, Varimax Rotation, by Ethnicity*

<table>
<thead>
<tr>
<th>Spouse or Romantic Partner</th>
<th>Hispanic</th>
<th></th>
<th></th>
<th>Non-Hispanic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>(1) It helps to turn to this person in times of need.</td>
<td>0.931</td>
<td>--</td>
<td>0.979</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) I usually discuss my problems and concerns with this person.</td>
<td>0.956</td>
<td>--</td>
<td>0.969</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) I talk things over with this person.</td>
<td>0.929</td>
<td>--</td>
<td>0.983</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) I find it easy to depend on this person.</td>
<td>0.893</td>
<td>--</td>
<td>0.934</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) I don’t feel comfortable opening up to this person.</td>
<td>--</td>
<td>0.572</td>
<td>--</td>
<td>0.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) I prefer not to show this person how I feel deep down inside.</td>
<td>--</td>
<td>0.620</td>
<td>--</td>
<td>0.841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) I often worry this person doesn’t really care about me.</td>
<td>--</td>
<td>0.879</td>
<td>--</td>
<td>0.938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) I’m afraid this person may abandon me.</td>
<td>--</td>
<td>0.906</td>
<td>--</td>
<td>0.927</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) I worry this person won’t care about me as much as I care about him or her.</td>
<td>--</td>
<td>0.899</td>
<td>--</td>
<td>0.927</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* only factor loadings greater than 0.45 are listed in table for ease of interpretation
Table 14

*Best Friend – Rotated Factor Loadings, Varimax Rotation, by Ethnicity*

<table>
<thead>
<tr>
<th>Item</th>
<th>Hispanic Factor</th>
<th>Non-Hispanic Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>(1) It helps to turn to this person in times of need.</td>
<td>--</td>
<td>0.887</td>
</tr>
<tr>
<td>(2) I usually discuss my problems and concerns with this person.</td>
<td>--</td>
<td>0.944</td>
</tr>
<tr>
<td>(3) I talk things over with this person.</td>
<td>--</td>
<td>0.930</td>
</tr>
<tr>
<td>(4) I find it easy to depend on this person.</td>
<td>--</td>
<td>0.735</td>
</tr>
<tr>
<td>(5) I don’t feel comfortable opening up to this person.</td>
<td>0.684</td>
<td>--</td>
</tr>
<tr>
<td>(6) I prefer not to show this person how I feel deep down inside.</td>
<td>0.662</td>
<td>--</td>
</tr>
<tr>
<td>(7) I often worry this person doesn’t really care about me.</td>
<td>0.904</td>
<td>--</td>
</tr>
<tr>
<td>(8) I’m afraid this person may abandon me.</td>
<td>0.901</td>
<td>--</td>
</tr>
<tr>
<td>(9) I worry this person won’t care about me as much as I care about him or her.</td>
<td>0.867</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note:* only factor loadings greater than 0.45 are listed in table for ease of interpretation

**Discussion**

**Research question.** A primary goal of this research was to compare a group of undergraduate Hispanic and Non-Hispanic students using the Experiences in Close Relationship Revised Structures (ECR-RS). The ECR-RS has been used, adapted, and validated by numerous researchers around the world across various populations and cultures (Donbaek & Elklit, 2014; Farley et al., 2011; Wongpakaran, et al., 2011; Ehrenthal, et al., 2009; Tsagarakis, et al., 2007; & Fairchild & Finney, 2006). Exploratory factor analysis has yielded a two-factor solution across...
These findings are consistent with the first validation study of this instrument measuring adult attachments in adult relationships (Donbaek & Elklit, 2014; Fraley, et al., 2011, Parker, et al., 2011). Past and current validation studies of the ECR-RS highlight the importance of assessing a two-dimensional attachment structure in relationship specific domains in adult samples with strong support of validity and reliability (Fraley, et al., 2011). It was assumed, from the much supported literature, that the ECR-RS would obtain the expected factor structure necessary as a reliable instrument used to measure adult attachment styles within these two groups.

The second goal was to compare adult attachment styles and scores in a college-aged sample of Hispanics and Non-Hispanics. A common assumption is that acculturated minority groups do not differ from the assessment norms typically developed with majority groups, although many aspects of their life experiences differ (Padilla & Borsato, 2008). Results showed the ECR-RS as a reliable instrument used to measure adult attachment styles cross-culturally and acculturated minorities reported similar responses in adult attachment across various relationship structures regardless of Hispanic traditions, norms, or family loyalties and values regardless of the generation they were born in the U.S.

**Conclusions.** The findings in this research study revealed that the exploratory factor analysis (EFA) conducted determined the consistency of factors within the Experiences in Close Relationships-Revised Structures as in past studies (Donbaek & Elklit, 2014; Fraley, et al., 2011; Parker, et al., 2011). This supports the application of the ECR-RS instrument to assess relationship specific attachment structures among a Hispanic population. The analysis compared the two-factor model found in the validation study of the ECR-RS (Donbaek & Elklit, 2014) with factor solutions of Hispanic and Non-Hispanic participants in each of the four relationship
domains, Mother, Father, Spouse or Romantic Partner, and Friend. The interpretation of the factor analysis revealed the ECR-RS is a suitable instrument used to measure and compare adult attachment styles among a Hispanic population. This also adds to the literature showing various adult relationship structures with sufficient reliability and validity used in other populations and cultures throughout the world (Donbaek & Elklit, 2014).

Thereby, the ECR-RS is a cross-culturally and valid instrument which appropriately recognizes adult attachment styles and has the potential to improve attachment research to better develop interventions used in a clinical setting. This valuable research is necessary since the Hispanic population continues to saturate many boarder states and cause much change in the Hispanic family as time passes and children grow. Learning more about this population would increase the attachment literature and research. Using the attachment framework would increase the internal reliability of the instrument which would improve interventions to enhance the mental health profession.
Chapter V

Summary, Limitations, & Recommendations

Summary

The purpose of this study was to examine the equivalence of factor structure of the Experience in Close Relationships Revised Structures instrument (Fraley, et al., 2011; ECR-RS) comparing Hispanic and non-Hispanic undergraduate college aged students attending a private university in a southwestern state completed the ECR-RS. Principal components factor analysis with maximum likelihood extraction provided an exploratory test of equivalence between samples (Barton & Kotecha, 2017; Tabachnick and Fidell, 2001; SPSS support, 2017). Results showed that the two-factor solution fits the data for both the Hispanic and non-Hispanic groups, with the exception of one factor, the best friend relationship domain. This indicates that the ECR-RS measures equivalent factors in both cultural groups, evidence for a cross-cultural validation of this instrument.

The central research questions guiding this study are: Does the obtained factor solution for Hispanic and Non-Hispanic participants fit the expected factor structure derived in the original ECR-RS validation studies. Exploratory factor analysis addressed this question. The findings showed a strong support of a two-dimensional framework of attachment across relationship domains between the two distinct groups. The ECR-RS, and the earlier versions of the scale, The Experiences in Close Relationships (ECR) have been used in empirical articles to measure adult attachment styles in various cultures and have been successful in validating the psychometric properties of the ECR-RS across relationship domains (Farley et al., 2011; Wongpakaran, et al., 2011; Ehrenthal, et al., 2009; Tsagarakis, et al., 2007; & Fairchild & Finney, 2006).
In this study, the results indicate that avoidance and anxiety dimensions do underlie adult attachment structures as reported by the participants of undergraduate college students attending a private university in the southwestern part of the U.S. These two subscales showed similarities in the avoidant and anxiety components. Another similarity was displayed as the factor loadings in the original study yielded similar scores for both avoidant and anxiety components. These subscales were moderately to highly intercorrelated within each relationship domain indicating these two dimensions are interrelated across different domains. This increased diversity across different relationships reveals their independent contributions which are consisted with previous adult attachment research conducted in empirical articles to measure attachment styles in various cultures (Farley et al., 2011; Wongpakaran, et al., 2011; Ehrenthal et al., 2009; Tsagarakis, et al., 2007; and Fairchild & Finney, 2006). The factor loading for each variable were similar and the inclusion of the two components displayed an increase necessary for a model fit (Mertler & Reinhart, 2013).

A major advantage of the current study is to compare adult attachment styles in a college-aged sample using ECR-RS and compare if the two groups have similar factor structure in adult attachment in relationships. Thus, expand the existing literature of attachment styles in college students of Hispanic and non-Hispanic in various relationships. As previously stated, the ECR-RS is a valid scale to measure students’ adult attachment styles in this context. It was suggested that participants from a private university in southwest region are likely to have attachment styles culturally appropriate with variations in relationship domains. This study distinguished similarities in relationship styles between the two groups in the areas of mother, father, spouse, and best friend regardless of the assumption that acculturated minority groups do not differ from the assessment norms typically developed with majority groups (Padilla & Borsato, 2008).
is acculturation literature suggesting Latino families have a strong sense of family obligation and turn to their family members who serve as their role models for support and that these individuals have a high likelihood of assimilation to the dominant country the longer they are away from their countries or origin (Marin et al., 1987; Miranda et al., 1998). This researcher did not anticipate that the majority of the participants attending this private university in a southern state would identify themselves as more than third generations born in the U.S.

In this study, both ethnic groups were considered acculturated and responded similarly to the assessment of questions, which suggest individuals do leave their traditional roles as they assimilate and adapt to the new home country (Miranda et al., 1998). It is important to mention that the majority of the sample identified as descendants of fifth or more generations born in the United States (see Table 5). Previous literature suggested that acculturated minority groups do not differ from the traditional norms typically developed with majority groups, although many aspects of their life experiences differ (Padilla & Borsato, 2008). However, these aspects of culture or traditions did not influence the responses of the participants related to the assessment of attachment within family relationships regardless of their ethnicity.

**Unexpected findings**

The researcher was surprised the participants, as a whole, identified themselves as five or more generations born in the U.S. which was the largest category (24.5%, see Table 5). It was assumed that the students would report perhaps, second or even third generations born in the U.S. It was this assumption which lead this researcher to believe that the participants would not differ from the norms of their Hispanic ancestors and answer the questions relatively different from the Non-Hispanic student body. However, their responses were similar with almost no significant differences. This finding, raised the question if this collected sample were
acculturated and would explain why their responses were similar because of their American culture. A person could argue that the similarities in their responses may be attributed to the young age and their experience as undergraduate students.

The majority of the participants were between the ages of 18-25 (54.3%; see Table 3). This tender age may represent the inexperience of having major life changes (i.e., childbirth, step-parenting, marriage, divorce, job loss) since this group has started attending and focusing on the first four years in a college setting. It is worth mentioning that there was not a question in the survey which asked participants if they had children, but they were asked if they were or not in a relationship. Another unexpected finding was the definition of a secure relationship held by the collected sample. Perhaps, the similarities in their responses was correlated with their perspectives from their need of the amount of assistance provided by their parents, spouses/romantic partners, and best friends needed for college life. Perhaps, in this stage of their lives, they must rely and depend on their support systems regardless of past hurts within those relationships. To prove this point, more than half of the participants reported being involved in a committed relationship (55.3%; see Table 3) and their income level was higher than expected for a young college student (majority reported income between $50,000 to $99,000; 33.8%; see Table 3) which one could conclude they are financially supported by their families and may not stray away from their dependence of those family members. The majority of the students who attend this private university originate from different cities within the state (St. Mary’s University Diversity: Racial Demographics & More, 2017). Thus, they may be home sick and have strong bonds of closeness with their support system. This common thread of dependence of their family members may give another reason why the students’ responses were similar.
Limitations

An important limitation found in this study was the failure to include a question in the survey pertaining to the identity of a participant’s heritage. Rastogi and Wampler (1999) stated in their study a need to study multiple culture samples while exploring the relationship bonds, emotional connections, and interdependence in relationship structures. In their findings, attachment patterns were culturally appropriate and stressed further investigation of differences between various cultures would adequately determine if the attachment framework is culturally universal. Rastogi and Wampler (1999) raised the notion that people of a similar culture in studies do not accurately represent that specific culture. Therefore, when comparing Mexican Americans to any other Hispanic group, however similar in areas of beliefs, ideas, values, and language should be represented independently and with clear distinctions of self-identifications. As previously stated, cultural differences are unique and worth exploring further using the attachment theory framework. Clinicians and mental health professionals should also examine specific characteristics and recognize family dynamics for assessment and treatment planning.

The ability of adjusting and integrating the old culture into a new culture is how Hispanics adapt to their new homeland without some struggles with assimilation and acculturation (Flores, 2000). This is why it is necessary to distinguish which type of group is represented. While this study investigated adult attachment styles among college students of Hispanic and Non-Hispanics, it failed to identify which subgroup of Hispanics.

The ECR-RS has the potential to be a useful instrument to measure adult attachment relationship styles across various relationship domains. However, there are possible limitations in this study. A general limitation is found within the instrument. The ECR-RS has been described by researcher Fraley et al., (2011) as an instrument that has some items unbalanced when scoring
during the analysis. Fraley explains that an investigator using the ECR-RS must reverse the scoring as the items are designed to analyze attachment-related anxiety because the items scored run in the opposite direction. Furthermore, Fraley mentions the instrument does address differentiating among people on the insecure end of this dimension, but fails to differentiate people who fall on the secure dimension. Another common limitation is the problem pertaining to self-reported measures and the accuracy and truthfulness of the responses gathered from the participants.

Specifically, in this study, a small sample size (N=199) ran the potential of ineffectively representing the instrument as a good model fit or the effectiveness of the analysis related to cross-loadings within relationship domains. However, the two-factor model coincided with the original study by Donbaek & Elklit (2014) and all analysis was administered without any indications of problems within the sample size. In all fairness, authors Mertler & Reinhart (2013) did note a general rule of thumb by, Stevens (2002) suggesting components with at least 10 or more low factor loadings of .40 are reliable if the sample size is greater than 150 participants. One noteworthy limitation is the collected sample of young adults educated in a private university; a population with certain familial characteristics which may be due to institutional constraints as a strong sample bias. This may include socio economic, education, young age, acculturation, or religious beliefs. Another limitation, the data collected from undergraduate students enrolled at private university in a southern state has the potential to have sample bias as compared to people who are not enrolled in college. Thereby, another example of sample bias based on students residing in an area where the majority are Hispanics with possible social constraints and how they may react differently to this sensitive topic.
In regard to gender, a high proportion of the sample used in this study were females (N=137) as opposed to the male sample (N = 62). Fraley, et al (2011) noted in his research that women are generally more interdependent and place a high regard with close relationships as compared to men. Further research on other age groups should also be considered in future research on attachment. Throughout the data there were areas with missing information where participants were allowed to skip the question without a response and freely move to the next question in the survey. Lastly, there were six participants who reported to have taken the survey more than once which would also challenge the accuracy of the analysis.

Suggestions for Further Study

Reading through past and current research used in this study would suggest the Hispanic population includes a vast body of people, culture, and nations. It could be argued the word Hispanic is not a monolithic term and does not encompass one type of Spanish speaking people and should be considered important to distinguish an accurate ethnic background. As the U.S. moves to the acceptance of all cultures, researchers should identify those specific cultures represented in their studies. In the majority of the literature used for this project (see Table 2) researchers labeled their Hispanic group under one umbrella of Hispanic. They failed to identify which group of Spanish speakers originated from a specific country or region. There is a vast difference between Hispanics from Chicago, Los Angeles, Miami, or a southern border state in Texas. This researcher recommends identifying specifically which type of Hispanic by asking participants their place of origin or which ethnicity they identify (Mexican-American, Cuban, Puerto Rican, Salvadorian, etc.). Researchers should ask which city and state the participants reside to collect a more complete dataset from volunteers. In this study, there was a question in the demographics section of the survey which asked their country of origin and generation born
in the United States. However, there was not a question which asked specifically if they were Mexican American, Cuban American, Asian American, Puerto Rican American, etc. A person may conclude the study did not accurately portray the true identity of the participants. This lack of information gathering did not support the exhaustive points made in the literature review to distinguish specifically the Mexican Americans.

In this study, it was assumed that the majority of participants would identify with the Mexican American heritage since the students this survey was administered to borders the country of Mexico. According to this university’s website, nearly 70% of their undergraduates are Hispanic; 90% of the student body of undergraduates came from its’ state which borders Mexico; and less than 10% are from other states (St. Marys University Diversity: Racial Demographics & More, 2017). In general, none of the undergraduates reported are from states in closer in proximity from border states. Arizona, New Mexico and California are the only other states which border Mexico, the other states were along the northern east coast and mid-western United States. This would suggest the importance of labeling ethnicity accurately.

For future research, it is important to explore different methods to increase the sample pool, so recruiting more students in other universities would be beneficial. In addition, recruiting a wider age of students, or various ages of people in the community, would create a richer collection of data with which to draw conclusions. Including a question in the survey pertaining to the participants’ belief if they have similar or different values from their families and allowing the needed space to elaborate on their answer would help give a better description of similarities or differences between the groups. Questions pertaining to life changing situations (i.e., divorce, marriage, childbirth) home sickness, there definition of acculturation, which city they were born, etc. should be explored for a clearer description of the sample.
For this study, reaching the 300 participants was a difficult task and random selection was unfortunately not an option. For future research, it is highly recommended to use a simple random selection technique to avoid any survey biases. However, the questionnaire was an online survey and this researcher did not have any direct contact with any of the participants.

**Suggestions for Mental Health Professionals**

Part of a clinician’s task when working with individuals, couples, and families is to recognize and identify adult attachment styles during the initial interview intake, assessment, and observations in a clinical setting. A method in appropriately recognizing adult attachment styles is to use a cross-culturally valid instrument which would improve research and clinical interventions used in this context.

This research is important because of the continual demographic changes among multiple generations of individuals of Hispanic descent. Therefore, a cross-culturally sensitive instrument with sufficient validation is vital for attachment research, as the author Taylor (1998) referred to the Hispanic population as a group constantly changing over time. As attachment theory continues to attract mental health professionals, successfully applying the attachment lens in challenges which cause distress and discord in Hispanic families would assist clinicians better serve this population by addressing contextual information using the attachment framework for clinical improvements.

Incorporating the ECR-RS as a tool to assess the attachment styles in various relationship structures, reported by their clients firsthand, would assist a clinician better understand important attachment bonds and emotional disconnections. In a clinical setting, a mental health professional would administer the online survey in their office with the client, or they may instruct the client to take the online survey in the privacy of their own home and bring the results
to the next clinical session. This would allow the clinician with a description of the attachment style for each relationship and the ability to explore further the history of that relationship in a clinical setting. A mental health professional would be able to ask questions pertaining to how their client forms lasting relationships or difficulty in forming lasting relationships, ability to show affection or not, trust or mistrust others, etc.

There are a few areas clinicians and researchers should understand when working with this unique and diverse group. There are historical effects of social injustices and despair found among minorities and their families. Flores-Ortiz (2000) stated that most individuals who have experienced oppression encounter feelings of shame, guilt, anger, and powerlessness. In addition, mental health professionals should strive for a better understanding of intimate partner violence, child abuse, and social violence experienced by minorities who have been dominated for centuries (Flores-Ortiz, 2000). This type of research is relevant as Hispanic Americans are a majority in the southwest areas of the United States (Duffey, 2000). Lastly, at the turn of the century, family counseling interventions were influenced by acculturation strategies (Miranda et al., 1998). The appropriate use of the ECR-RS using the attachment framework would assist mental health professionals better serve this underserved and underprivileged population address their psychological health pertaining to their assimilation and acculturation to a new country as the Hispanic population continues to grow at rapid rates. This study serves to provide important information on how Hispanic individuals, couples, and families behave in and experience adult romantic relationships.
References


attachment orientations across relationships. *Psychological Assessment.* Advance online publication. doi:10.1037/a0022898


Appendices

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Appendix A

Experiences in Close Relationship- Revised Structures Instrument

The following nine questions pertain to your mother or mother-like figure. Please indicate the extent to which you agree or disagree with each statement by a number for each item.

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<th>strongly disagree (1)</th>
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<th>somewhat disagree (3)</th>
<th>neither agree or disagree (4)</th>
<th>somewhat agree (5)</th>
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The following nine questions pertain to your spouse or romantic partner. Please indicate the extent to which you agree or disagree with each statement by a number for each item.

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The following nine questions pertain to your best friend. Please indicate the extent to which you agree or disagree with each statement by a number for each item.

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Appendix B

Demographic Form

Demographic Form: Sample 1

Ethnic Please identify your ethnic background.
- White/Non-Hispanic (1)
- Hispanic/Latino (2)
- Black or African American (3)
- Native American or American Indian (4)
- Asian or Pacific Islander (5)
- Other (6)

Gender Demographic Information Are you male or female?
- Male (1)
- Female (2)

Age How old are you?
- 18-25 years (1)
- 26-35 years (2)
- 36-45 years (3)
- 46-55 years (4)
- over 55 years (5)

Relationship: Are you involved in an exclusive romantic relationship (i.e., dating, engaged, or married)?
- No (1)
- Yes (2)

If yes, how long?
(drop down box was blank for participants to fill in manually)

Residence: What is your country of residence?
(drop down box was blank for participants to fill in manually)

Were you born in the United States?
- yes (1)
- No (2)
Display This Question:
If “Were you born in the United States?” yes Is Selected
If you were born in the United States which generation from your family?
☐ First (1)
☐ Second (2)
☐ Third (3)
☐ Fourth (4)
☐ More (5)

Income: What was your current economic status for your family in 2014?
☐ less than $20,000 annually (1)
☐ between $20,000 to $34,999 (2)
☐ between $35,000 to $49,999 (3)
☐ between $50,000 to $74,999 (4)
☐ between $75,000 to $99,999 (5)
☐ over $100,000 annually (6)
Appendix C

Informed Consent & Cover Letters for Participation

Informed Consent Form – Sample 1

Introduction: The purpose of this study is to conduct a cross-cultural validation of a common instrument for assessing adult attachment, the Experiences in Close Relationships-Revised Structure (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011). This study will survey 350 undergraduate students. Procedures: Participants will be White/Non-Hispanic and Hispanic/Latino students enrolled in introductory courses in the liberal arts, sciences, and business schools at St. Mary’s University. All students in selected classes are invited to participate in the survey which will take approximately 10 - 15 minutes to complete.

This assessment instrument is designed to assess adult attachment across four kinds, but separate relationships. This self-report scale has 7-items in each of the four relationship domains. The first set of 9 questions pertain to the relationship with mother or mother-like figure. The second set of questions address the relationship to reflect the father or father-like figure. The third set of questions target the dating or marital partner and the last set of questions are geared to describe the best friend relationship.

Risks/Discomforts Risks are minimal for involvement in this study. Although we do not expect any harm to come upon any participants, it is possible though extremely rare and uncommon.

Benefits Students may experience some positive satisfaction from their contribution to support research in their selected field. This contribution may be useful when comparing the relationship between adult attachment styles of the participants. As stated previously, the results will help to better understand and focus social resources to a specific population.

Confidentiality: All data obtained from participants will be kept confidential and will only be reported in an aggregate format (by reporting only combined results and never reporting individual ones). All questionnaires will be concealed, and no one other than the primary investigator will have access to them. The data collected will be stored in the HIPPA-compliant, Qualtrics-secure database until it has been deleted by the primary investigator. There is no direct compensation. Participation in this research study is completely voluntary. You have the right to withdraw at any time or refuse to participate entirely without jeopardy to your academic status, GPA or standing with the university. If you desire to withdraw, please close your internet browser and notify the principal investigator at this email: valdez6@stmarytx.edu.

Questions about the Research If you have questions regarding this study, you may contact Lupe Valdez, principal investigator, at gvaldez6@stmarytx.edu Or, you may contact Dr. Dan Ratliff, dissertation advisor at dratliff@stmarytx.edu Questions about your Rights as Research
Participants. If you have questions you do not feel comfortable asking the researcher, you may contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736 or email at IRBCommittee@stmarytx.edu. I have read, understood, and printed a copy of, the above consent form and desire of my own free will to participate in this study.

Yes (1)

No (2)
Appendix D

Recruitment: Brief Description of Study for Professors’ Review

& Email Announcement for Participants

Dear Professor,

I am conducting research comparing adult attachment styles among undergraduate students using a specific instrument, Experiences in Closes Relationships Revised Structures (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011). I need 350 undergraduate students, over 18, to complete a brief on-line survey. The survey will ask about peer and family relationships; none of the questions will address any sensitive topics. Students’ responses will be anonymous, and students may discontinue the survey at any time. The survey should take no more than 10-15 minutes to complete and can be accessed online at:

http://stmarys.az1.qualtrics.com/SE/?SID=SV_0I2lYJxQyVg0QrH

This study is approved by the Institutional Review Board at St Mary’s University in San Antonio, Texas. If participants have any questions about their rights as a research participant or concerns about this research study please contact the Chair, Institutional Review Board, St. Mary’s University at 210-436-3736 or email at IRBCommitteeChair@stmarytx.edu.

If you have any questions at all, please contact me at gvaldez6@stmarytx.edu or my dissertation chair, Dr. Dan Ratliff, at dratliff@stmarytx.edu.

Please email the three paragraphs above to all the students in your SMC course(s). The easiest way to do this is to copy these paragraphs to the email feature of your Blackboard course system.

Thank you very much for your time and consideration,

Lupe Valdez
Doctoral Candidate
Marriage and Family Therapy Program
Dept. of Counseling and Human Services
One Camino Santa Maria
St. Mary’s University
San Antonio, TX 78228
Appendix E

IRB Application & Approval Stamp

September 18, 2015
Guadalupe Valdez
Dept. of Counseling
St. Mary's University

DELIVERED BY EMAIL TRANSMISSION

Dear Ms. Valdez:

The IRB has approved the study, Valdez, L. (Ratliff, Fac Sponsor). Comparing Attachment Styles Among Undergraduate Students Using the Experiences in Close Relationships Revised Structures (ECR-RS) for the period of 9/18/2015 to 9/01/2016. The proposal is determined to meet criteria for exemption under 45 CFR 46.101(b)(2).

If you have any questions about your rights as a research subject or concerns about this research study please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736 or email at IRBCommitteeChair@stmarytx.edu.

Dan Ratliff, Ph.D.
IRB Chair
St. Mary's University

DETERMINATION OF WAIVER OF SIGNATURE REQUIREMENT 45 CFR 46.117(c): IRB determines that the protocol meets the requirements for a waiver of the documentation requirement, an original signature for informed consent: minimal risk. Signed informed consent is only link to identity, principal risk is breach of confidentiality, and involves no procedures for which written informed consent is normally required outside the research context.

You may collect data from human subjects according to the approved research protocol. The approval stamp must appear on any Information Form or Informed Consent Form approved by the IRB (jpeg file attached).
If, at any time, you make changes to the research protocols that affect human participants, you must file a "Changes to Approved IRB Protocol and/or Unanticipated Problems" form. Changes must be reviewed and approved by IRB before proceeding with data collection.

Good work on an interesting approach to family therapy needs. I look forward to seeing your results.

Dan Ratliff, Ph.D.
IRB Chair

IRB Policy states, "No individual involved in the conduct and/or supervision of the research project shall participate in its review." This certifies that Dr. Ratliff did not participate in the IRB review. After the IRB members reached their determination, Dr. Ratliff assisted with the preparation of the documents.

Melanie Harper, Ph.D.
IRB Area Representative, Counseling Dept.

ATTACHMENT: Approval Stamp jpeg file
CC: Dan Ratliff, Ph.D., Faculty Sponsor
    H. Ray Wooten, Dept Chair
    Melanie Harper, Ph.D., IRB Area Representative
The IRB has approved the study, Valdez, L. (Ratliff, Fac Sponsor). *Comparing Attachment Styles Among Undergraduate Students Using the Experiences in Close Relationships Revised Structures (ECR-RS)* for the period of 9/18/2015 to 9/01/2016. The proposal is determined to meet criteria for exemption under 45 CFR 46.101(b)(2).

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Dan Ratliff, Ph.D.
IRB Chair
St. Mary's University
Appendix F

CURRICULUM VITAE
Lupe Valdez, M.S., LPC

South Texas Family Connections, P.O. Box 8624
Corpus Christi, Texas 78468
(361) 334-4046

Education

Doctor of Philosophy (Expected 2017). Marriage & Family Therapy. St. Mary’s University, San Antonio, TX. Dissertation title: Comparing Adult Attachment Styles Among Hispanic and Non-Hispanic Undergraduate College Students Using the Experiences in Close Relationships Revised Structures (ECR-RS)

Master of Science (2003). Counseling, Emphasis in Marriage & Family Therapy. Texas A&M University Corpus Christi, TX

Bachelor of Arts (2000). Psychology, Emphasis in Early Childhood Development. Texas A&M University Corpus Christi, TX


Teaching Experience

Adjunct Faculty
Park University, Naval Air Station, CC, TX
Spring 2005 - Spring 2008

- Introduction to Counseling
- Introduction to Psychology
- Abnormal Psychology

Teaching undergraduate students in Psychology Department. These students were military personnel enrolled in eight week “fast track” semesters covering required core competencies in each subject area successfully.

Student Teaching
St. Mary's University
Fall 2011

- Community Counseling

Teaching an overview of relationships between students, counselors, and other
professionals in a variety of practice settings; techniques of community needs assessment and program evaluation; overview of methods used in community settings; and characteristics of community service programs. In addition, students learned the role of racial, ethnic, and cultural heritage, nationality, socioeconomic status, family structure, age, gender, sexual orientation, religious and spiritual beliefs, occupation, and physical and mental status in community counseling.

**Special Trainings**

Minority Fellowship Program 2009-2012, *American Association of Marriage & Family Therapists, SAMHSA.*

- Received over 800 hours of cutting edge training and support to address the pressing mental health and substance abuse treatment needs of underserved populations. Thus, creating a more culturally competent and accessible mental health services for ethnic minorities. The integration of issues such as social justice, trauma, the needs of minority families, health information technology, and outcome-informed interventions via various teaching methods.

**Employment Experience**

Owner/ Director

South Texas Family Connections (STFC)

- Manage multiple contracts with non-profit and for-profit organizations in the Coastal Bend Community.
- Certified Trainer Approved by The State of Texas & Community Educator in facilitating educational seminars for people.
- Successfully operate a small business in the community using effective networking, marketing, and management skills.
- Coordinate and delegate facilitators for weekly meetings scheduled throughout the community in various locations.
- Develop programs addressing and recognizing culturally relevant information which may cause barriers to minority populations.
- Manage & operate accounting knowledge practices in small business.
- Counseling post adoption and foster children for local adoption agency.

Clinician/ Family Home Developer/ Case Manager

Lutheran Social Services- Bokenkamp Children’s Shelter & Transitional Foster Care

Corpus Christi, Texas

Clinical Duties

6/2014 - present
• Coordinate clinical services throughout the Transitional Foster Care program
• Work with Program Director to set ratios of clinician to UAC's as required by ORR standards.
• Child Centered Play Therapy techniques
• Conduct initial mental health (bio-psychosocial) assessments on each child at time of admission.
• Coordinate and provide weekly individual and group counseling services.
• Coordinate pre-admission, admission and discharge services.
• Provide complete weekly reports to the Division of Unaccompanied Children's Services (DUCS) Program Coordinator and as needed.
• Reinforce positive behavior by providing healthy, positive incentives for children.
• Serve as liaison between Agency staff and community programs involved in children's treatment plans.
• Provide crisis intervention services to program, as required.

**Family Home Developer Duties**

5/2014 - as needed

• Represent the agency and program in a professional manner at a variety of recruitment events and venues to market and network with others regarding agency services. Assist with making presentations to the general public when requested. Build relationships and serve as liaison with selected agencies, community stakeholders and potential program collaborators.
• Assist, support, develop and implement a comprehensive recruitment and retention strategy to bring new foster and foster to adopt families into agency operations. Work closely with the Foster Care Program Director in completing target goals to maximize foster care potentials.
• Documentation on all files
• Ongoing training needs of active foster parents (continuing education)
• Complete and submit all necessary documentation accurately, including case files, contracts, data and statistics in timely fashion; lead, support, implement a tracking system for foster families in all phases of the recruitment verification process and post licensure of foster families.
• Support home study process and conduct home study interviews and write home study document for prospective foster parents when requested.
• Gaining the necessary training and certifications to become active
• Maintaining accurate records and files on new foster and/or adoptive parents.
• Monitoring prospective foster and/or adoptive families/homes for compliance With Minimum Standards

**Case Manager Duties**


• Review, present and complete placement UAC packets.
• Complete ISP/UAC Assessment & PSP with all UAC's.
• Contact prospective sponsors to discuss role of LSS and reunification process.
• Ensure sponsor information is included in family reunification packet.
• Attend weekly case staffing meetings with Case Coordinator
• Conduct bi-monthly home visits with each UAC to assess child's emotional, social, and psychological functioning.
• Maintain contact with foster parents regarding child's progress and needs and complete monthly documentation on all cases.
• Adhere to all state and ORR policies pre and post reunification process.

Clinician, 2016 UAC Surge

BCFS Emergency Management
El Paso, Texas

• Coordinate and provide weekly individual and group counseling services for UACs in Spanish Language.
• Provide crisis intervention techniques to enhance mental health stability for UACs.
• Assist with staff development and training.
• Utilize positive child management techniques including verbal redirection and de-escalations.
• Reinforce positive behavior by providing healthy, positive incentives for children.

Clinician

Upbring Transitional Foster Care (ORR)
Corpus Christi, TX

• Conduct initial mental health (bio-psychosocial) assessments on each child at time of admission.
• Coordinate and provide weekly individual and group counseling services. Provide on-call clinical support as necessary.
• Attend team meetings and develop treatment plans for each child.
• Coordinate pre-admission, admission and discharge services.
• Gather and properly document all necessary social, medical, and educational information on each child. Provide complete weekly reports to the Division of Unaccompanied Children's Services (DUCS) Program Coordinator and as needed.
• Assist with staff development and training.
• Utilize positive child management techniques including verbal redirection, de-escalations, and physical containment.
• Reinforce positive behavior by providing healthy, positive incentives for children.
• Maintain appropriate boundaries with children at all times.
• Serve as liaison between Agency staff and community programs involved in children's treatment plans.
- Provide crisis intervention services to program, as required.
- Attend Regional Review conferences, team conferences and court hearings.
- Wrote home studies for agency to develop potential foster families.

Marriage & Family Relationship Specialist  
*Spaulding for Children*  
Corpus Christi, TX

- Authored a couple’s workbook for trainer’s for the agency with seven core sessions with fun filled activities to use during meetings as additional information from weekend getaways.
- Authored a trainer’s workbook to compliment the couple’s workbook for the agency.
- Successfully assisted in implementation of deliverables of Healthy Marriage Initiative Grant awarded through Department of Health and Human Services.
- Conduct 16-hour marriage/relationship workshops to pre-adoptive couples and post-adoptive couples during weekend getaways in local hotels in Corpus Christi, McAllen, & Laredo, TX.
- Provide post-adopt services in Corpus Christi, McAllen, & Laredo, TX. for adoptive families. These services include monthly parenting seminars and support group meetings.
- Meet with department supervisors in offices in Houston, Corpus Christi, McAllen, & Laredo, TX for grant updates to discuss quarterly reports and information pertinent with grant.
- Implement and develop age appropriate activities for the adoptive children’s groups educating them with grief and loss, separation, attachment, healthy families, and other topics to assist their transition from foster care to their new forever families.

Education Facilitator  
*The Family Place, Texas A&M University*  
Corpus Christi, TX

- Coordinate and facilitate various educational presentations for local community agencies to educate individuals and families with life skills.
- Graduate intern specializing in community outreach and networking to promote personal growth and family cohesion.
- Facilitate interactive groups for small children, students, and adults in the community.
- Instruct classroom guidance lesson plans in various schools.

**Internship Sites**

Family Life Counseling Center  
*St. Mary’s University, San Antonio, TX*
• Provide individual, couple, and family therapy in the community using a sliding fee scale.
• Document client information in appropriate files following policies and procedures as designed by institution.
• Schedule and maintain sessions individually with clients.
• Collect and document fees for each session appropriately.
• Attend supervised meetings with faculty advisor during each semester as required by institution and state regulations

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<thead>
<tr>
<th>Charlie’s Place</th>
<th>6/2015 - present</th>
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<tr>
<td>Corpus Christi, TX</td>
<td>7/2011 - 8/2013</td>
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| • Provide in-patient services for patients in residential detox facility.  
  • Provide individual, couple, and family therapy service for drug and alcohol related individuals in treatment.  
  • Facilitate groups in life skills trainings.  
  • Document client information in appropriate files.  
  • Certified Veteran Peer Support Group Facilitator for weekly veteran group meetings.  
  • Attend supervised meetings with off-site supervisor as implemented by institution following policies and standards. |

| Guadalupe Valley Community Counseling Center | 08/2011 - 5/12 |
| Seguin, TX                                  |                 |

| • Provide individual, couple, and family therapy service in the community using a sliding fee scale for people without health care insurance.  
  • Document client information in appropriate files following policies and procedures as developed by facility.  
  • Schedule and maintain sessions individually with clients.  
  • Collect and document fees for each session appropriately.  
  • Attend supervised meeting with off-site supervisor as required by institution and state regulations. |

**Professional Presentations**


**Awards & Scholarships**

2015 CCISD Parent Involvement

2012 Research Program Project Funding Award, *American Association Marriage & Family Therapy (AAMFT)*


2011 & 2003 Corpus Christi Independent School District

2010 Coastal Bend Healthy Marriage Coalition

**Professional Service & Memberships**

Coastal Bend Healthy Marriage Coalition

- President (2005-2007)
- Vice-president (2007-2009)
- Member (2004-2012)
This coalition began in December of 2004. A community meeting lead by community leaders was held to address the need for a Healthy Marriage Coalition in our area. We met regularly to define a mission and vision for our community. I was nominated and elected president of this fine coalition. I have been a member since inception. As a community effort, we have been a part of a community responsible for marriage education with funding awards exceeding millions of dollars through various healthy marriage grants.

Coastal Bend Chapter of Play Therapy Association
  • Student member

American Association for Marriage & Family Therapy
  • Student member

References

Deborah Ferguson, LPC-S, LMFT
Director Family Program
Charlie’s Place Detox & Residential Facility
(361) 826-5372

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Transitional Foster Care
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(361) 558-3730

Mari Villanueva, Lead Clinician
BCFS- El Paso Surge
(956) 463-8693