Winter 3-19-2018

Variation in Emotion Eliciting Events and Display Rules as a Function of Individualism and Collectivism: A Cross Cultural Comparison of Pakistanis and Americans

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Variation in Emotion Eliciting Events and Display Rules as a Function of Individualism and Collectivism: A Cross Cultural Comparison of Pakistanis and Americans

A Dissertation

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

By

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February, 2018

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Acknowledgements

I would like to express my sincere appreciation to my dissertation chairperson, Linda Camras, and committee members, Midge Wilson and Bernadette Sanchez. I would also like to thank all the participants who completed surveys and helped inform participants about the opportunity to participate in this study.

Biography

The author was born on October 30, 1976 in Harvey, Illinois. She graduated from Redlands High School in Redlands, California in 1994. In 1998, she received a Bachelor of Arts Degree in Psychology from the University of California at Riverside before moving on to earn a Master of Arts Degree in Research Psychology from California State University at Fullerton in 2001.

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ABSTRACT.

Culture not only influences the conditions under which we will experience an emotion, but also may have bearing on its manner of outward expression. This study investigated cultural differences in the construction of emotion-eliciting events and the associated display rules for exhibiting those emotional responses to others within the context of the cultural classification system known as Individualism/Collectivism (I/C) (Triandis, 1994, 1995; Triandis et al., 1988). In this comparative study, individualists were represented by a sample of participants from the United States whereas collectivists were represented by a Pakistani participant sample.

I/C tendencies of the Pakistani and American respondents were assessed via a 38 item I/C self-reported measure which assessed their values and behaviors towards four social interactant groups; family, close friends, colleagues and strangers. Respondents were also asked report on situations in which they felt one of five emotions and as a follow-up, in order to understand their emotional display behaviors, respondents were asked to report on their tendency to express the elicited emotion, in the situation they described, as well as their manner of expression.

Study results indicate that Pakistanis were indeed more collectivistic in their values and behaviors towards family members confirming the notion that indeed Pakistani culture is typical of this collectivistic ideology. However, this did not extend to their close friends and findings were more nuanced for when considering colleagues and strangers. Further results indicated that American

respondents were more likely to write stories representing collectivistic values than were Pakistani respondents. This was contrary to the hypothesis that Pakistani and American respondents would construct stories that were in line with the cultural typology of their country of residence. Also, with respect to emotional display behaviors, analyses conducted indicated that American respondents were the more expressive group. It was also found that happiness, sadness, and pride are more likely to be expressed than anger and shame. While this study was small in scope, its findings suggest the important possibility that Pakistani students are more like U.S. students than might be expected.

CHAPTER I.

INTRODUCTION

Researchers and lay people alike agree that emotions are fundamental aspects of human behavior. Emotions bind people together in social groups, help determine priorities within social relationships, and provide information to the emoter about his or her own reactions to the environment, as well as his or her own current motivational state. Observable expressions of emotions provide information to onlookers and social partners regarding the affect of the expresser.

While emotions are biologically based, they also are subject to the influence of the culture in which they are experienced. Culture provides guidelines to the individual about which emotions are appropriate to experience and express in a given social situation. Thus, across various cultural groups, ways of feeling and expression are shaped by the group's norms of social behavior (Markus & Kityama, 2001).

Problem Statement

Much of the early emphasis in emotion research has centered on the determination of the universality of emotion expressions and the functions of emotions. There is now much agreement that emotions are the primary motivational forces in humans and that much of our behavior is organized in the service of emotion-related functions and goals. Theorists concur that there is a basic set of universal emotions linked to discrete facial expressions, all of which are tied to the subjective experience of the individual. Furthermore, facial expressions are indicative of felt emotion, have communicative value, and can be altered, masked, minimized or substituted. Nevertheless, for an emotion to occur there must be

some evaluation or *appraisal* of the emotion-eliciting event during the emotion-elicitation process. This process is typically broken down into three components: an antecedent event, the encoding of that event, and the appraisal of the event. That is, when an event occurs it is coded and categorized according to concerns of the individual (e.g., insult, praise, threat) and that the response or expression of the resulting emotion is not only contingent on the emotor's appraisal but his or her cultural context as well. Culture not only influences the conditions under which an individual will experience an emotion, but also may have bearing on its manner of outward expression – display rules. The current study seeks to understand cultural differences in the construction of emotion-eliciting events and the associated display rules for exhibiting the elicited emotional response to others. This was examined in the context of one of the most popular and well documented cultural classification system known as Individualism/Collectivism (I/C). In this comparative study, individualists were represented by a U.S. sample whereas the collectivistic typology is represented by a Pakistani sample.

Literature Review

Although the body of emotion literature has grown to examine a variety of emotional processes and various influences over those processes, much of the early emphasis in emotion research centered on the determination of the universality of emotion expressions and the functions of emotions.

Universal Emotions and Emotional Expression

Over a century ago, Darwin (1872/1998) proposed that all humans share a set of basic emotions (e.g., anger, sadness, happiness, surprise) that are indexed by a set of species-wide facial expressions. Although he was not the first to

propose this hypothesis, he was the first to describe these emotions and their corresponding expressions based on a plethora of data from a variety of sources (e.g., the physiologist Duchenne (1862/1990), lay observers, and his own observations). He combined these data to provide richly detailed descriptions of emotional expressions in humans and animals.

Darwin contended that these expressive behaviors can be explained in terms of three principles. These three principles are: serviceable associated habits (evolutionary remnants of once adaptive facial movements in emotion-related situations), antithetical actions (actions that are in direct opposition to ones that were evolutionary adaptive, e.g., the submissive dog posture that is quite opposite of the aggressive stance), and nervous system excitation (automatic readouts partially due to habit and partially due to excitation of the nervous system).

Furthermore, Darwin sought and found cross-cultural commonalities in expressive behaviors elicited by similar circumstances. He viewed these commonalities as support for shared phylogeny, which, in turn, corroborated his evolutionary account of display behavior.

Based on the entirety of his data, Darwin also concluded that facial expressions communicate to others how the individual feels, making them essential to the welfare of group living species (Darwin 1872/1998; Niedenthal, Krauth-Gruber, & Ric, 2006).

Cultural specificity within universality. Although it was insightful for its time, Darwin's work was ignored for over a century. Instead, anthropologists (e.g., Bateson,1972, Birdwhistell, 1970, La Barre, 1947, and Mead 1975)

espoused the idea that emotional expression varied across cultures. They promoted the view that “facial expressions...like language, socially learned, culturally controlled, and variable in meaning from one setting to another” (Ekman, 1984, p. 319).

Others adopted more intermediate views that included the notion of the universality of some emotional expressions but also left room for culturally indigenous expressive behavior. For example, Klineberg (1938) cited examples of the universality of the fear expression while also providing instances of more culturally specific emotional responding (e.g., characters in Chinese novels sticking their tongues out in an expression of surprise).

Despite the assertions of anthropologists, Silvan Tomkins (1962/1963) revived Darwin's proposals about universal emotions and emotional expressions. Tomkins, like Darwin, claimed that emotions and their associated facial expressions were innate and universal to our species (Ekman, 2003; Tomkins, 1962). Without the evidence needed to support his claims, Tomkins convinced psychologists, Paul Ekman and Caroll Izard, to pursue such confirmation unbeknownst to each other.

Ekman and colleagues extended Darwin’s methodology by developing a standardized set of stimuli of American faces exhibiting prototypic facial expressions. The stimuli set was validated with a sample of U.S. college students who were asked to choose the correct facial expression for each of six emotions: happiness, surprise, anger, fear, sadness, and disgust. Ekman subsequently used this standardized set in studies with international respondents (Chile, Argentina,

Japan, and the United States) who were provided a list of six-to-ten emotions that could be used to describe the stimulus pictures (Ekman, 1972; Ekman, 2007).

Although Izard (1977) independently replicated Ekman's results in his own expression recognition studies, the possibility of cultural contamination remained. Participants in each study had access to American movies and other forms of mass media that may have influenced the respondents' perceptions. Thus, it was theoretically possible that obtained results were artifacts of passive learning about American expressive behavior through media outlets.

To further clarify his results, Ekman (1980) later extended his studies to include preliterate Papua New Guinea cultures that had almost no contact with Western civilization. He detailed his experiences with these preliterate peoples, who were still using stone utensils and tools, and lacked access to television, movies, pictures, or any other modern technologies.

The participants in Ekman's study were shown a series of three pictures of facial expressions while being read an emotion-eliciting scenario (e.g., "A person's mother died," and "She/he is looking at something that smells bad"). Observers were then asked to point to the photograph of a facial expression that best fit the story.

Ekman also employed an etic approach to developing new stimuli that were more relevant to these indigenous peoples. Emotion scenarios (e.g., meeting an old friend or stumbling upon a decaying animal) were used to elicit posed facial expressions from the Papua New Guinea participants. Ekman noted that these posed expressions had similar facial muscle configurations as those seen in

Western participants under similar circumstances. Further confirmation was received when U.S. college students were able to correctly identify the posed emotions from unedited videotapes (Ekman, 1980; Ekman, 1999b; Ekman, 2007; Ekman & Friesen, 1971).

Ekman (1980) and Izard (1971) were able to find consistent agreement in cross-cultural studies, involving both literate and preliterate societies, save for fear and surprise expressions which were most often confused with one another (Ekman, 1980; 1999b; Izard, 1971). In this manner, Ekman and Izard were able to provide the evidence that Tomkins lacked.

Many contemporary theorists, including Tomkins, Izard, and Ekman, implicitly share the view that emotions are the primary motivational forces in humans and that much of our behavior is organized in the service of emotion-related functions and goals. They share considerable common ground in their description of the adaptive functional goals of specific discrete emotions (e.g., removing an impediment to some desired action is thought to be the functional goal of anger). Nevertheless, these theorists do differ in the specifics of the motivational process (e.g., whether emotions lead to behavior or whether emotions themselves emerge during the process through which behavior is organized in the service of a functional goal). However, these theorists concur that there is a basic set of universal emotions linked to discrete facial expressions, all of which are tied to the subjective experience of the individual.

In contrast, one of the most vocal opponents of this discrete emotions view of facial expressions has been Alan Fridlund. Rooted in the work of Hebb (1970)

and Heinroth (1911), (as cited in Frijda, 1995) Fridlund's views advocated a *behavioral ecology* view of facial displays which contends that expressions are intent and context-specific (Fridlund, 1994; Frijda, 1995).

Unlike Darwin, Fridlund (1994) espoused that facial displays are not automatic accompaniments to emotional states but instead are functional responses that play an active role in social interactions. As such, for Fridlund, facial displays are meant to communicate social motives.

For example, in his research Fridlund (1994) found that when viewing amusing material, participants' smiles are more intense when viewed with a friend than when viewed alone. Furthermore, his viewpoint contended that there are no prototypic expressions for a given emotion. There could be dozens of displays associated with any given emotion, again, all of which serve to communicate the social intent of the displayer and not his emotional experience. For instance, a smile could serve to communicate a greeting between two people meeting, whereas in other contexts it might serve to convey appeasement, approval, solidarity, sympathy, or readiness to play (Fridlund, 1994).

Fridlund's views notwithstanding, many contemporary psychologists have taken the position that there is a basic set of universal emotions, including sadness, anger, fear, happiness, disgust, and surprise. They further have accepted the notion of universal emotions with corresponding prototypic facial expressions. They have acknowledged that facial expressions are indicative of felt emotion, that expressions have communicative value, and that the emotional expression can

be altered, masked, minimized or substituted at the individual level (see Haidt & Keltner, 1999; Keltner & Ekman, 2000).

Beyond universality. More recently there has been a shift in emphasis from establishing universality to the examination of the emotion elicitation process itself. This shift in emphasis has resulted in a body of literature that has generally been referred to as appraisal theories (Scherer, 1999).

At the most basic level, these theorists have agreed that there must be some evaluation or *appraisal* of the emotion-eliciting event in order for an emotion to occur (Lazarus, 1966; Lazarus, 1982/1984; Mesquita & Frijda, 1992; Scherer, 1984a,b). This process involves a categorization and evaluation of events in terms of impact, an individual's life, and the things about which people care.

For example, Lazarus (1991) held that happiness is achieved when individuals determine that they are making progress toward achieving personal goals. Pride results from taking credit for a valued object or achievement by oneself or a related person or group. Sadness is due to significant loss, shame from the evaluation that one has failed to live up to an accepted standard, and anger from the evaluation that one's goals are being blocked. As such, appraisal theories maintain that what makes emotions emotional is that the eliciting event matters to us personally.

The emotion-elicitation process typically is broken down into three components: an antecedent event, event coding, and the appraisal. When an event occurs, it is coded and categorized according to concerns of the individual (e.g., insult, praise, threat) and therefore perceptions and interpretations of the meanings

of emotional responses can vary among individuals as well as between groups and different societies. Appraisals themselves are then based on the evaluation of the event type in regard to one's well-being, personal goals, and ability to cope with them. It is this assessment that defines and distinguishes between the meanings of various forms of emotional responses (Parrott, 2004).

Appraisal theories marry the view that emotions are biologically based with the view that emotions are culturally informed. They propose universality in the appraisal process corresponding to each emotion while also acknowledging cultural differences in the events that elicit these emotion-specific appraisal processes.

Appraisal theorists contend that while basic emotions are biologically-grounded and universal, the types of events attended to, the coding of these events, and the emotional reactions to them vary as a function of culture, gender, relative power status, and the relationship between interacting partners (Frijda, 2000; Hess & Kirouac, 2000).

Before examining the cultural influences on people's process of selecting emotional responses and interpreting the emotional behaviors of others, it is helpful first to describe dimensions of cultural variability in the next subsection. Here, the elicitation process is thought to be affected by the overarching influence of the culture in which the person resides.

Dimensions of Cultural Variability

Culture refers to a set of learned behaviors, values, attitudes, and beliefs that are created by a group of people for itself and which is shared among its members who, typically, are bound by a shared language and common geography

(Hofstede, 1997; Matsumoto, 1996, Spencer-Oatey, 2008). These historically functional behaviors become a part of the culture, given that they retain their intended functionality (Herskovits as cited in Brislin, 2002; Matsumoto et al., 2008).

For example, all cultures have noticed that humans experience hunger, fatigue, and illness and have developed customs and practices to explain their origins and dictate the manner in which they are to be interpreted (Keltner & Haidt, 2001). It is logical to assume, then, that cultures can vary from one geographical location to another as well as within localities.

For example, for the Ifaluk people, who live on a coral atoll of four islands in the central Caroline Islands in the Pacific Ocean, in the Federated States of Micronesia, the danger response is typically signaled by environmental factors related to the built and natural world such as proximity to open wells, lagoon waters, and sloping trunks or roots of trees, whereas in Israel, danger antecedents are more culturally based and tend to refer more frequently to dangers inherent to interaction with strangers or use of public transportation (Parkinson, Fischer, & Manstead, 2005). In Pakistan, there is a tendency for people to live in an extended family system; whereas, in the U.S. the normative living structure is more centered around the individual or the nuclear family. This simple fact influences a variety of facets of family living from the manner in which relationship hierarchies are structured to influences on people's perceptions of how to choose appropriate emotional displays in various social contexts. Similarly, antecedents of emotions may vary depending on the varied experiences

that one's locality has to offer. As such, culture alters the use and expression of many traits, including emotions, as culture gives people flexibility and creativity in designing their lives, social practices, norms, and institutions (Keltner & Haidt, 2001; Wierzbicka, 1999).

Anthropologists and cultural psychologists have developed systematic frameworks for describing dimensions of beliefs, attitudes, and values that may differ across cultures. One of the most prominent cultural classification systems involves the distinction between dimensions related to individualism and collectivism (I/C) (Triandis, 1994; 1995; Triandis et al., 1988).

Although not the only classification system in current use the I/C system has come to be one the most influential in a variety of literatures (Matsumoto et al., 1997; Matsumoto et al., 1998; Matsumoto et al., 2005; Triandis, 1994; 1995). This framework provides a basis for making specific predictions about cultural differences in the manner people may typically demonstrate an emotional response to particular types of stimuli. These include differences in both the emotions experienced in response to a particular situation and differences in whether or not one expresses the experienced emotion and if so, in what manner particular emotions are expressed.

For instance, it has been found that individualistic cultures appear to foster greater expression of felt emotions, especially of negative emotions, than collectivistic cultures do. Collectivists also seem to foster greater expression of positive emotions to in-group members and negative emotions toward *out-group*

members (Matsumoto et al., 2005). The next section will highlight some of the seminal research on Individualism and Collectivism.

Research on the concept of individualism and collectivism. The contemporary prominence of the distinction between individualism and collectivism is the result of several decades of research in which scholars have tried to identify the most important dimensions of cultural differences. This system of cultural classification can be traced back to Hofstede's (1980) seminal study of cultural differences. In this landmark study, Hofstede collected data on IBM (corporation) employees from over 40 countries. His results indicated four dimensions on which cultural differences can be noted: a) power distance (the extent of power inequality in the organization), b) uncertainty avoidance (avoidance of the unknown by members of an organization), c) individualism and collectivism (the manner in which these dimensions are reflected in the way people live together), and d) masculinity and femininity (differential gender roles).

More recently, Hofstede (1991; 2001) added a fifth dimension: long-term versus short-term orientation. Long-term orientated societies are persistent; they tend to order relationships by status and adhere to the established social order, are thrifty, have a sense of shame, and enjoy high economic growth (e.g., Japan, China, Germany). In contrast, short-term orientated societies are concerned with personal steadiness and stability, saving face, value respect for tradition, reciprocation, and enjoy less economic growth (e.g., India, United States, Egypt).

Hofstede further concluded that wealthy cultures (e.g., United States, Britain, and Australia) tend to be individualistic, whereas poor cultures (e.g., Pakistan, India, and Latin America) tend to be collectivistic. Additionally, cultures in colder climates tend to be more individualistic, whereas those in warmer climates tend to be collectivistic (Hofstede, 1980). It should be noted, however, that until recently this body of research has been concerned with the aggregation of I/C tendencies to the country level. By doing so, they have chosen to dismiss individual differences and assume group homogeneity (for additional challenges to Hofstede's work see Oyserman, Coon, & Kemmelmeier, 2002 and Baskerville, 2003).

Hofstede's work sparked a plethora of research on the distinction between individualist and collectivist cultures, beginning with the highly influential work of Triandis. After reviewing preliminary findings on individualist and collectivist constructs, Hui and Triandis (1986) compiled a list of behaviors thought to differentiate between individualists and collectivists and sought to confirm them as being reflective of their typologies.

Hui and Triandis composed seven situations (e.g., "Suppose the person did something immoral (e.g., stole from someone). Would he or she worry what the other person would think if he or she were found out?"), with 10 target groups (spouse, mother, siblings, relatives, good friends, co-workers, neighbors, acquaintances, strangers living in the same place, and strangers living in a different country). Scientists from around the world were asked to respond to the 70-item survey as if they were a collectivist and then again as an individualist.

Respondents registered their responses on a five-point scale (with one being an affirmation and five, a negation) based on their understanding of provided definitions of the two constructs. The researchers did not, however, solicit feedback on the proposed definitions.

Hui and Triandis (1986) found considerable agreement among the social scientists about the behavioral tendencies of collectivists and individualists. Collectivists were found to hold the following qualities: a) give high consideration to the implications of their own behavior for others, b) share material and non-material resources with others, c) emphasize *in-group* harmony, d) be controlled by shame, e) share both good and bad outcomes with others, and f) feel that they are a part of the in-group's life.

Individualists, on the other hand, were found to have the following characteristics: a) share only with their immediate nuclear family, b) be less willing to confront in-group members, c) feel personally responsible for their successes and failures, and d) maintain some separation and distance from their in-groups (Hui & Triandis, 1986). Overall these findings aligned well with the constructs of Individualism and Collectivism and provided further support for these cultural typologies.

One of the most comprehensive studies of individualism in the United States yielded similar findings. Bellah, Madsen, Sullivan, Swindler, and Tipton (1985) conducted a series of research investigations on American individualism. They sought to understand the American way of life including private (e.g., love and marriage) and public (e.g., civic participation) responsibilities of the

individual. The researchers reported a content analysis of interviews with 200 Americans about their lives and revealed the following themes: a) self-reliance, independence, and separation from family, religion, and community; b) hedonism, utilitarian emphasis on exchanges; c) competition, being a distinguished person; d) involvement in community life and in associations; e) equality, rejection of arbitrary authority; f) the self as the only source of reality (Hui & Triandis, 1986).

Based on a review of the literature that has sought to determine the typical characteristics of individualists and collectivists, the following profiles for each as were constructed for the current study:

Individualism and collectivism defined. This section contains a definition of individualism and collectivism. These two concepts were central to the research and research question and were used to organize data analysis.

Collectivism. Collectivists place an enormous value on maintaining strong bonds within their in-groups or culture. *In-groups* are defined as comprising people that are concerned for and invested in the individual's well-being. Group members seek to conform to group norms and fulfill its social and cultural obligations (Kim, 1997; Matsumoto et al., 1998; Schimmack, 1996; Stephan et al., 1998). As such, being a team player and working for the betterment of the in-group is considered more important than being an individual. Thus, conformity within in-groups is expected, and sanctions for nonconformity exist (Bond & Smith, 1996). Collectivists share material and nonmaterial things with group members, including possessions, goals, and sharing news—both good and bad

(Hui & Triandis, 1986). Personal goals that conflict with the group's goals are more likely to be set aside in order to avoid conflict within the group.

To the collectivist, then, the individual cannot be separated from others or the surrounding social context; the focal point, therefore, in an individual's experience is self-in-relation-to-other. Interpretations of events are very much dependent on the impact of a given event on the different relationships that one has within the *in-group*.

Within a collectivist culture, in-group relationships themselves are hierarchical, with individual position and rank being determined by characteristics such as birth order, age, and gender. Vertical relationships that are in conflict with horizontal relationships take priority. Membership in these groups may at times be involuntary but are always intimate and enduring (Triandis et al., 1988). In this manner, in-groups have a profound effect on a person's behaviors. Just as collectivists value their closeness to their in-group members, they value distance from out-group members. Collectivists tend to belong to fewer in-groups than do individualists, as the emotional commitment and intimate bond with these groups is much greater.

***Individualism*.** Those from individualistic cultures are found to focus on developing and fulfilling personal goals and desires. It is considered important to be independent and *your own person*. To these ends, the pursuit of personal goals trumps the need to avoid conflict with in-group members who may differ in their goals. The attainment of personal dreams and fulfillment of personal needs is considered a priority over maintaining smooth relationships with others.

Once again, the individualist focus is on self-reliance, independence, separation from religion and community; additionally, the interpretation of events entirely depends on the subjective feelings of the person and the importance of the event to the person. Individualists only share good news and bad news with their immediate family, all while maintaining a comfortable distance from them. This may also mean that they prefer to live apart from their immediate family members.

Similarly, individualists tend to make intimate acquaintances easily with the effects of these groups on their behavior being minimal and specific. Competition is welcomed in order to distinguish oneself from others, and the self is the only source of reality (Bellah, Madsen, Sullivan, Swindler, & Tipton, 1985; Hui & Triandis, 1986; Markus & Kityama, 2001; Matsumoto, 1989; Matsumoto et al., 1998; Schimmack, 1996; Stephan et al., 1998).

Measuring individualism and collectivism. Until this point, much of the research related to I/C worked toward creating measures that would quantify I/C in terms of various psychological constructs (e.g., attitudinal value and norm ratings, self-perceptions, and independent and dependent self-construals) at a more aggregated group level (see Hui, 1988; Triandis, 1985, Triandis et al., 1986; Singelis et al., 1995). Yet, a measure that would allow for individual differences in I/C and allow for in-group heterogeneity was lacking.

To fill this void, David Matsumoto (1997) moved to develop a measure that would achieve just this goal. He developed an instrument that allowed for the exploration of *across* and *within* group differences in I/C values and eloquently

extended previous efforts by the mapping of I/C tendencies in relation to specific persons or groups with whom people interact (i.e., family, co-workers, friends, colleagues). The 25-item Individualism-Collectivism Interpersonal Assessment Inventory (ICIAI) (see Appendix A) presents participants with statements describing social behaviors (e.g., maintain self-control, remain loyal) and asks them to rate each behavior on a seven-point scale.

The ICIAI instrument involves two scales: values and behavioral frequency. That is, the items ask individual participants to separately indicate how much they value each behavior and how frequently they engage in the behavior.

Because people may vary in how much they value and engage in a behavior, depending upon the identity of particular types of social relations, the ICIAI also requires participants to rate each item (behavioral descriptor) separately with respect to members of four different social groups (family, close friends, colleagues, and strangers). Thus, identical items are rated eight times (four social groups times the two scales of values and behavioral frequency).

General indices of I/C, for each social group and scale, are produced by averaging across all 25 items. Higher scores reflect a more collectivistic orientation. Furthermore, the 25 items can be grouped into four subscales: social harmony (i.e., honor tradition, loyalty, respect for elders, compromise, and communication), social identification (i.e., be like them, follow norms established by them, save face for them), self-control (i.e., maintain self-control and exhibit proper behavior with them), and social sharing recognition (i.e., share credit,

share blame). Additional scores for each subscale can be produced separately for each social group and scale. This is done by averaging the items associated with that scale yielding a total of 32 scores per individual (two scales times four subscales times four social groups). In this manner, different derived scores represent the different aspects of the I/C construct.

Items for the original scale derived from existing literature (including Hui 1984; 1988; Schwartz, 1990; Triandis, 1995) applied two criteria: a) items that could be applied to interpersonal interactions and b) items that described general values related to specific relationships (e.g., obedience to authority). Items that were tied to specific actions were removed, and the remaining set of items was tested and validated with pre-existing measures of I/C (e.g., Triandis's multi-method approach and Hui's INDCOL). The ICIAI was revised to a 19-item assessment in 1996. The ICIAI is currently one of the few available valid and reliable tools that affords researchers the ability to assess IC tendencies related to the interpersonal context across multiple social groups.

The Link between Culture and Emotion

The socio-cultural context shapes one's emotional experience in two ways. First, by determining which events elicit a particular emotional response. Second, by shaping how the event is appraised by the expressor (Klinberg, 1938; Mesquita & Walker, 2003).

In other words, recall that when two cultural groups were asked about causes of fear, the Ifaulk people referred to fearful responses to environmental dangers such being near open wells or lagoon waters, whereas Israelis more often described feelings of fear derived from social situations such as interactions with

strangers or use of public transportation (Parkinson, Fischer, & Manstead, 2005). Similarly, identical *events* may give rise to dramatically dissimilar emotional responses in different cultures. For example, cultures that vary along the lines of individualism and collectivism may respond differently to the same emotion-eliciting event due to their different goals and values. In the following sections, studies that investigate cultural differences in the elicitation of emotion are reviewed.

Emotional response to an identical event. One study conducted by Mesquita (2001) sought to examine cross-cultural differences in emotional responses to an identical eliciting event. Emotional reactions of family members and close friends in response to matriculation of a target individual were noted through interviews with the graduates from two different cultures.

Mesquita's results indicated differences between graduates from a collectivist culture (Turkish) and those from an individualists' culture (Dutch). Specifically, for graduates who derived from a collectivist culture, the meaning of the school matriculation event was constituted by its impact on the various relationships the respondent had, is represented as obvious and apparent (i.e., not perceived subjectively), and is equally relevant to others who are emotionally involved in the event.

In contrast, in the Dutch sample, graduates described the meaning of the event entirely in terms of its relevance to the respondent's own standards and goals. The graduates focused on subjective feelings and to the importance of the respondent alone (Mesquita, 2001).

Taking a somewhat different approach, Boucher and Brandt (1981) sought to examine the accuracy with which U.S. participants would identify emotions resulting from antecedent event scenarios constructed by their peers as well as by a sample of Malaysian informants. Malay and American participants produced two antecedent events for each of the six emotions under investigation (i.e., anger, disgust, fear, happiness, sadness, and surprise). Stories constructed in Malay were translated into English and cleaned for mention of cultural references (e.g., names of places). A total of 96 situations, eight for each emotion, were randomly selected and presented to 30 participating U.S. college students from the University of Hawaii.

Participants were asked to read a scenario depicted in one of the stories and then asked to select one and only one emotion that they believed would be elicited by the event. Response options were limited to the six aforementioned emotions: anger, disgust, fear, happiness, sadness, and surprise. The researchers found that overall 65.8% agreement in judgments of the American situations and 68.9% accuracy of Malay situations.

Interestingly, the sample of American participants was more accurate in judging situations constructed by Malay participants than were the ones constructed by American peers. This was particularly true for disgust (57.5% vs. 68.6%, American and Malay respectively), happiness (79.2% vs. 81.7%), and surprise (55.8% vs. 65.4% Malay). However, analysis of variance results yielded a non-significant main effect for culture. Instead, a main effect for emotion was noted as significant. These findings suggest that the eliciting events for some

emotions were judged more accurately than others. For instance, happiness had one of the highest accuracy rates; however, of the happiness situations incorrectly categorized, most were categorized as surprise. This pattern was also pronounced for anger and disgust, with misidentified disgust situations most often inaccurately identified as anger-eliciting events.

The researchers suggested that one possible reason for this may have been due to the types of situations constructed. Approximately a third of the elicited events were rather impersonal and lacking in content (i.e., Mary's mother died or John was lost in the forest). However, while this confusion has been noted elsewhere in the literature (see also Ekman, Friesen, & Ellsworth, 1972), it is still plausible to assume different results with a larger, more diverse sample, as well as with richly detailed emotion-eliciting events that provide further information on context, including information on relationships of any possibly involved interactants. Finally, with the lack of a measure of cultural variability between the two samples, it is presumed that cultural differences exist.

Scherer and colleagues (Scherer, 1997; Scherer & Wallbott, 1994; Scherer, Wallbott, Matsumoto, & Kudoh, 1988) conducted an extensive study to examine a number of components of the emotional appraisal process as well. Their 37-country study asked college students to recall situations in which they felt seven emotions: joy, anger, sadness, fear, shame, guilt, and disgust. Participants were then asked to detail their experience of the emotion, the appraisal of the situation, and the intensity and duration of the emotional reaction.

Using a subset of this dataset, Scherer et al. (1988) examined the responses of Japanese, American and European study participants who experienced situations in which the four emotions (anger/rage, sadness/grief, happiness/joy, and fear/anxiety) were experienced. Antecedent events were coded into themes broad enough to encompass all emotions (e.g., relationship with friends, achievement related situations). That said, some emotion-specific codes were later introduced (e.g., justice for anger antecedents and body pleasures for happiness).

Cross-cultural differences were noted among the three comparison groups. Europeans and Americans cited joy and happiness in response to cultural pleasures (e.g., art, music), birth of a new family member, and body-centered basic pleasures (e.g., sex), whereas these same antecedents were found less frequently among Japanese participants, who reported experiencing more joy and happiness from relationships with friends and family.

Achievement in Japan is often associated more with expectation and pressure than joy. Consequently, achievement-related joyful situations were much more frequently reported in the U.S. and European samples than in the Japanese samples. The birth of a new family member was also not as pleasure inducing for Japanese as for their U.S. and European counterparts. Researchers hypothesized this was due to the diversion of personal attention and resources away from the individual to the new sibling (Scherer et al., 1988).

Differences in antecedent events were also noted for situations that elicited sadness. Japanese participants were rarely saddened by world events or death as

compared to their American and European counterparts. Scherer et al. (1988) suggested two reasons for this. Ruling out differential news reports, researchers suggested a greater tendency for Americans to show empathy for victims of catastrophic events (e.g., victims of natural disasters, hijackings) who are members of an out-group whereas Japanese tend to be more interdependent and therefore more concerned with other members of their in-groups, and therefore they tended to experience less sadness in response to events experienced by people perceived to be members of the out-group.

Further significant differences noted in reaction to death were attributed to the Japanese Shinto-Buddhist beliefs surrounding death. Death of a family member or close friend accounted for one in five of all sadness experiences in the European and American samples, whereas in the Japanese sample experiencing the death of an in-group member accounted for one in 20 incidences of experiencing sadness. While it is not assumed that the mourning process for the three cultures is different, researchers suggested that Japanese religious beliefs, specifically the belief that the soul of the loved one is always with the family, serve to mitigate their sadness response.

However, sadness due to interpersonal relationship problems is common in Japan. This category of antecedents includes problems with groups, immediate family members, loved ones, and other relatives. This corresponds well to the relational nature of Japanese in that in-group relationships were also noted as one of the major sources of happiness for these participants (Scherer et al., 1988).

Cultural differences were further noted in major events that were fear- and anger-inducing. Once again, antecedent events concerning relationships were noted more frequently in the Japanese sample as fear-inducing. With the Japanese, fear of strangers was almost inconsequential; instead fear in the Japanese context was noted for novel situations, failure to achieve, and traffic.

In terms of fear/anxiety, fear of strangers was a frequently used category for Americans closely followed by fear of failure in achievement situations. Europeans also frequently cited failure to achieve as well as traffic accidents as elicitors of fear/anxiety.

In regards to emotional responses to anger/rage, Japanese participants were very different than American and European-American participants. Japanese were found to be most readily angered by strangers. Comparatively, 60% of American students experienced anger in response to some relationship issue with a known other.

Social norms for behavior were cited by the authors as the most likely source for this disparity (Scherer et al., 1988). Japanese society dictates more control over the expression of anger to in-groups even when transgressions have been made. Europeans and Americans were also more angered by injustice than Japanese, who in comparison, were virtually unaffected by it. Across the seven emotions under investigation, Scherer et al. (1988) noted an overarching focus on interpersonal relationships for Japanese participants. Once again, this finding, consistent with Mesquita's later study (2001), pointed to the relational nature of collectivists' emotions.

Overall, these studies (Boucher & Brandt,1981; Mesquita, 2001; Scherer et al., 1988) yielded mixed findings but suggested that individuals, consistent with their cultural norms, will respond differently to emotion eliciting events depending on the extent to which their culture tends toward individualism or collectivism. In general, a higher level of concern for interpersonal relationships informs the collectivist's response to emotion-eliciting events (Mesquita, 2001; Scherer et al., 1988). Still, other results suggested that emotion eliciting events can be accurately judged across cultures with some confusion noted for happiness, disgust, and anger (Boucher & Brandt, 1981).

Taken together, there is some evidence supporting the notion that culture will guide the emotional experience of an individual by influencing the types of events that the individual will attend to and the aspects of those events that will determine an emotional reaction. In the following section, the outward expression of these emotional experiences is explored.

The Concept of Emotional Display Rules

Culture not only influences the conditions under which an individual will experience an emotion, but also may have bearing on its manner of outward expression. Ekman concisely captured this idea with his concept of *display rules*. The concept of display rules itself, however, predates its nomenclature, as it was originally used to explain observed inconsistencies in emotional reactions within the cross-cultural literature. Without explicitly naming the construct, Klineberg (1938;1940) employed the concept to explain a curious phenomenon he encountered, namely, that individuals in some cultures displayed a ferocious expression while participating in an otherwise festive occasion. Specifically, there

was an apparent disconnection between the emotional display and the emotional context within which the display was produced.

Additionally, Klineberg compiled examples from around the world where anthropologists had noted similar disconnections, such as occasions of joy lacking a complementary expression and occasions of grief matched with a polite smile as opposed to a more emotionally-congruent facial expression. He correctly noted that such expressions were, in fact, products of cultural norms and not a different natural emotion–expression pairing (Ekman, 1973; Klineberg, 1938; 1940; Russell, 1994).

Such deviations from prototypic expressions are typically considered to be the products of social learning (e.g., modulation of the fear face into a bit more of a smile that is generally consistent with the notion of "grin and bear it"), (Ekman & Friesen, 1975). As such, it is assumed that facial expressions of emotions can be controlled through adherence to various social norms and conventions in both the public and private realm. There are, moreover, personal display rules that are not cultural products, but are rather products of personal or familial idiosyncrasies. In either case, display rules are usually well-learned at a relatively young age and adhered to without conscious effort (Ekman & Friesen, 1975).

Ekman (1972) and Ekman and Friesen (1969) described four ways in which emotions can be altered in accordance with display rules: inhibition, intensification, de-intensification, and masking. *Inhibition* is the act of suppressing or neutralizing the emotion that is being felt (e.g., the suppression of anger at an authority figure such as one's parent or boss). *Intensification,* on the

other hand, is the production of a stronger emotional reaction than what is actually being experienced (e.g., showing more grief at a funeral than one actually feels or showing an exaggerated surprise reaction). Conversely, *de-intensification* is the production of the felt emotion with less intensity than what is actually being experienced (e.g., a muted smile). Finally, *masking* is communicating an emotion that is entirely different than the one a person is experiencing (e.g., smiling while being reprimanded by an authority figure).

Through their research Matsumoto et al. (1998) later added qualification as a modification option. Qualification is the displaying of a felt emotion in conjunction with, either simultaneously or subsequently, a different emotion (e.g., showing anger with a smile).

Display rule research. The first noted attempt to study this type of emotional regulation of expression was by conducted by Friesen (1972). In an effort to examine differences in facial displays of emotions between American and Japanese college students, Friesen noted the altered emotional display of Japanese students in the presence of others. He found that Japanese students, in the presence of an older male experimenter, would smile in response to being shown a video of a stressful situation. This response differed from their original response of disgust/sadness shown when viewing the video in private, responses that matched the reactions of their American counterparts when viewing the same film alone (Friesen as cited in Ekman, 1972; Matsumoto et al., 2005).

Accordingly, researchers concluded that Japanese students altered their true response in the presence of the older male because the Japanese, as a

collectivistic people, emphasize harmony and the preservation of status differences more than American students. However, in the absence of querying participants on their choice of modification (or non-modification) or the appropriateness of their response, the study fell short of adequately testing this inference.

More recently, Matsumoto and colleagues have taken on the task of examining the variation of display rules across cultures in a more systematic manner. Starting in 1990, Matsumoto attempted to test a framework of cultural differences that incorporated individualism/collectivism, power distance (PD), and the social distinction between in-group and out-group members. Based on the characterization of collectivists in the existing literature, he postulated that their demand for greater distinction between in-group and out-group members would lead collectivists to show more positive emotions to in-group members as compared to their individualistic counterparts. In comparison, these same characterizations would lead individualists to show more negative emotions to in-group members than collectivists. Conversely, his framework predicted that individualists would show more positive emotions to out-group members than would collectivists, who, in turn, would show more negative emotions to out-group members as compared to their more individualistic counterparts.

Similarly, Matsumoto (1990) proposed that different sets of display rules operate for high and low power distance cultures and that these sets inform the manner in which individuals of differing social status will interact. Recall that power distance reflects the manner in which interpersonal relationships form and

develop when differences in power and status are perceived. Accordingly, the notion that low PD cultures are seemingly more egalitarian led to the hypothesis that more positive emotions would be exhibited across status hierarchies in such communities. Conversely, members of high PD cultures, vested in preserving hierarchical relationships, would be expected to show more positive emotions to higher status others.

To test these hypotheses, Matsumoto (1990) utilized 24 posed photos of six emotions (anger, disgust, fear, happiness, sadness, and surprise). Participants were instructed to provide an intensity rating for the posed emotion, as well as to indicate the appropriateness of the display in eight situations (alone, in public, with close friends, with family members, with casual acquaintances, with people of higher status, with people of lower status, and with children [although ratings for children were later dropped from analysis]). Scores for *Alone, Higher Status* and *Lower Status* were used as separate categories in data analysis. "In-groups" scores were composed of *Close friends* and *Family Members* while *In Public* and *Casual Acquaintances* comprised scores for "out-groups." Participants were shown pictures of a same-race poser (one male and one female poser per emotion) and asked to complete their responses on a nine-point Likert scale (0 = not at all; 8 = a lot).

With Americans representing a low PD individualistic culture and Japanese participants representing a high PD collectivist culture, results indicated that Americans rated the exhibition of more negative emotions (such as disgust and sadness) to in-groups as more appropriate than did their Japanese

counterparts. This finding supported Matsumoto's (1990) original hypothesis that the endorsement of individualistic values would lead to the endorsement of showing negative emotions to in-group members. Also, in line with his hypotheses, Japanese participants, as opposed to their American counterparts, rated anger as more appropriate with out-group members and with lower status others, confirming that these collectivists did indeed find it more appropriate to express negative feelings to out-group members. Additionally, across cultures, participants rated the showing of emotions to lower status individuals, as compared to higher status others, as being more appropriate for all emotions, save for happiness.

Unexpectedly, a finding that countered the theoretical assumption that a collectivist would not show socially disruptive emotions to their in-group members or to higher status individuals was noted; Japanese participants rated the exhibition of fear and surprise with in-groups and high status individuals as more appropriate than did American participants. Also, American participants rated happiness (a socially bonding emotion) when alone as being more appropriate than did their Japanese counterparts, further contradicting the expectations of Matsumoto (1990). Instead, results indicated that collectivists were more expressive of positive emotions to in-group members than their individualistic counterparts. Matsumoto suggested the absence of others as one possible explanation of this finding, stressing again that display rules are a social phenomenon.

While interesting and informative, Matsumoto's (1990) study had several limitations. It is curious to note that Matsumoto did not use his individual level measure of I/C (i.e., the ICIAI), choosing instead to use Hofstede's aggregated country level ratings for the United States and Japan. Also, with the lack of an individual level measurement tool for PD, Matsumoto once again referred to Hofstede's aggregated country level ratings. Furthermore, in the 1990 study, posed photos were utilized without the context of an emotion-eliciting event (e.g., the person in this photo is sad because the father will not give the child permission to go out with friends). It is reasonable to assume that the social disruptiveness of showing anger at one's father for not allowing one to go out with friends is considerably less than showing anger at one's father for making a career choice, which, in turn, is different than angrily informing one's father that one is being tormented by a sibling. Researchers, for instance, have found that situational context is more central to the meaning of elicited emotions in many non-Western cultures, whereas in Western cultures, emotions are seen as primarily individual responses that are more personal and therefore detached from the context (Lutz, 1987; Masuda et al., 2008; White. 1990). Thus, it would seem pertinent to either query or control the emotion-eliciting event when examining the consequential display.

A further problem was the use of a composite category of *Close friends* and *Family Members* for "in-groups" but *In Public* and *Casual Acquaintances* for out-groups. For example, in hierarchical cultures (e.g., Pakistan), rules for social interaction are dictated by age and gender status (Zaman, Stewart, & Zaman,

2006). Thus, the manner in which one would interact with one's mother is different than the social guidelines for interacting with one's father, and, for that matter, so are the norms for interacting with an older sibling versus a younger sibling. It is then plausible that gender and hierarchical relationship variations within the broad category of *Close Family* will impact the response sets.

Finally, Matsumoto himself noted the absence of more positive emotions and called for the examination of the social role of emotions. For example, happiness is thought to be an *integrating* emotion, although few studies have examined the validity of such a notion.

Having noted the limitations, however, it is important to state that Matsumoto (1990) was the first to examine display rules in a cross-cultural context after Friesen's (1972) and Ekman's (1972) initial studies, and that Matsumoto's research considerably extended Friesen's and Ekman's studies by considering a number of additional emotions (Matsumoto et al., 1998) and cultural dimensions not previously examined.

In a follow-up study, Matsumoto and colleagues (1998) sought to investigate cross-national differences in emotional display rules and the degree to which those differences could be attributed to I/C measured at the individual level. It was predicted that I/C would not only be highly correlated with display rules, but it would also account for the majority of observed variance.

To these ends, the Display Rule Assessment Inventory (DRAI) (Matsumoto, Yoo, Hirayama, & Petrova, 2005) was constructed to measure display rules at the individual level. Participants were given a list of four social

relationships (family, close friends, colleagues, and strangers) and a list of seven emotion terms thought to be universally expressed (anger, contempt, disgust, fear, happiness, sadness, and surprise). Additionally, seven synonyms were provided to participants to check for internal reliability (hostility, defiance, aversion, worry, joy, gloom, and shock). Participants were then asked to consider the use of several display options when interacting with members of each of the four social groups for each of the seven emotions. Display options reflected the various ways in which expressions are thought to be altered (express, de-amplify, amplify, neutralize, qualify, mask, and other). Furthermore, respondents completed their ratings in two domains: social value (i.e., what they should do) and self-reported behavior (i.e., what they would do). Responses were noted on a seven-point labeled scale, where higher scaled scores indicated more control over emotional expressivity (Matsumoto et al., 1998).

Additionally, the investigators used the ICIAI, designed to measure I/C at the individual level, to assess the influence of individualism/collectivism on participant's attitudes about display rules. As earlier described, the ICIAI, a self-report measure, contains 16 items across two domains (values and behaviors). It assesses an individual's values towards, and behavioral interactions with, others from four relationship groups: family, close friends, colleagues, and strangers. The 16 items (per domain) are responded to on a seven-point scale (see Measuring Individualism and Collectivism for more details on this measure).

For the purpose of data analysis, Matsumoto et al. (1998) aggregated scores on the ICIAI to the country level, for each of the four social relationships,

and for each of the four subscales (social harmony, social identification, self-control, and social sharing of recognition). Student respondents from the United States, Japan, South Korea, and Russia participated in the study.

As predicted, results yielded country level differences in I/C (Matsumoto et al., 1998). ICIAI scale scores aggregated to the country level yielded support for cross-national differences in the overall level of I/C. I/C differences were also found across gender lines within Russian and U.S. participants, where females rated higher on collectivism than their male counterparts.

Further analysis suggested that Russian and Korean participants are more collectivistic toward family and close friends than Japanese participants, who, in turn, exhibited more collectivist tendencies when interacting with strangers. Interestingly, examination of the ICIA's subscales revealed that American participants scored higher on social harmony (i.e., honor tradition, loyalty, respect for elders, compromise, and communication) than did the Japanese participants, who, in turn, scored higher than Russian and Korean participants. Koreans scored higher on social identification (i.e., be like them, follow norms established by them, and save face for them) and social sharing (i.e., share credit, share blame) than did American and Japanese respondents. Japanese respondents scored lowest on social identification, self-control (i.e., maintain self-control and exhibit proper behavior with them), and social sharing of recognition (i.e., share credit, share blame).

These results demonstrated dimensionality within cultural categories, as is evidenced by the inclusion of qualifiers such as *context* (i.e., social harmony,

social identification, self-control, and social sharing of recognition) and *relationships* (i.e., family, close friends, colleagues, and strangers). They further serve as reminders that not all collectivist cultures are homogenous in either the manner in which individuals interact with others or in their value systems (Matsumoto et al., 1998).

The hypothesis that there would be cross-national differences in display rules was supported by Matsumoto's (1998) research. Results indicated that collectivist Russians exercised the greatest amount of control with family, friends, and colleagues (Matsumoto et al., 1998). This finding was consistent with the characterization of collectivists as being more concerned with the maintenance of harmony and cohesion between one's self and the in-group. Americans participants had higher control ratings for all emotions with strangers.

Further analysis suggested that males and females exert a different amount of control over their emotional expression. Females were found to exert more control over anger, contempt, and disgust than their male counterparts, who, in turn, exerted more control over their fear and surprise expression (Matsumoto et al., 1998).

Furthermore, the hypothesis that individual level I/C (as measured by the ICIAI) would be correlated with the use of display rules (DRAI scores) across all four countries was also supported (Matsumoto et al., 1998). With higher scores on the ICIAI indicating greater tendencies of collectivism, and higher scores on the DRAI indicating more control over emotional expression, positive correlations were noted for anger, contempt, and disgust—especially in relation to family and

colleagues. Results for happiness, fear, sadness, and surprise indicated that collectivism was related to less control of these emotions in these relationships.

Thus, overall results continued to be consistent with the characterization of I/C. A greater need to control disruptive emotions such as anger, contempt, and disgust within in-groups was noted, as was an encouragement to display synthesizing emotions such as happiness (Matsumoto et al., 1998).

The final hypothesis examined the contribution of individual level I/C to the cross-national difference in display rules. With this goal in mind, a comparison of country level effects models, with and without I/C as a covariate, found that IC scores accounted for an average of 21.74% of the original effect size by country. Other simple effects analyses ranged from 36.5% to 40.98%. While these are considered to be strong contributions, they were not as large as expected and suggested the need to consider other variables that may serve to inform the current method of cultural categorization.

Similarly, the influence of I/C on display rules was found to be about 10% between countries, again a statistic lower than expected. Interestingly, noted differences in how males and females express their emotions, particularly disgust and contempt, suggested further investigation across gender lines is warranted (Matsumoto et al., 1998).

Examination of gender differences was not one of the main hypotheses of the study (Matsumoto et al., 1998). However, results highlighted the need for further examination. While Matsumoto and colleagues (1998) offered no

explanation for these differences, they did suggest the need to examine cultural categories that might explain such differences.

More recently Matsumoto et al. (2008) conducted an impressive study on the relationship between emotional display rules and I/C. Seventy-five collaborators, representing 40 countries, helped to craft the study, which incorporated an extensive end sample (N = 5,361) from 32 of the 40 countries. The study adopted a revised version of the DRAI, which consisted of 21 interactants (alone, father, mother, older brother, older sister, younger brother, younger sister, male close friend, female close friend, male acquaintance, female acquaintance, male student higher class, female student higher class year, male student same class year, female student same class year, male/female student lower class year, male/female older professor, and male/female younger professor) in two domains (private–alone at home, and public–restaurant where others can hear you).

To test the hypotheses, the nominal data of the DRAI was converted to a continuous scale of zero-1.0989 (where a score of zero indicated expressing nothing, and 1.0989 indicated an amplification of expression). I/C data came from Hofstede's (2001) study of cultural dimensions. These data were presented as country level means, based on items for each cultural dimension, from Hofstede's values questionnaire.

Generally, the study found expression regulation to be universal. Matsumoto et al. (2008) noted country differences accounted for 5% of the total variance accounted for and that all cultures endorsed expression toward in-groups

more than out-groups. More specifically, based on prior studies, the team had hypothesized country and cultural differences in the overall emotional expressivity. An emotional expressivity norm was calculated by collapsing DRAI scores across all emotions. Results indicated that higher scores on individualism were positively correlated with the expressivity norm. Still closer analysis indicated the majority of significance resulted from differences in the expressivity of happiness and surprise.

The researchers further hypothesized two types of within-culture variability in expressivity norms. Variability within cultures can come from two sources: inter-individual variability (i.e., "individual differences in overall expressivity norms across contexts and emotions"), and intra-individual variability (i.e., "variability within an individual across contexts and emotions"). Researchers predicted that individualists would be higher in inter-individual variability. That is, individualists would be found to have high inter-individual variability, as they are encouraged to express themselves as they feel in and across all situations.

Also, it was hypothesized that high scores on individualism would be associated with lower intra-individual variability, as individualism espouses consistency of expressivity across context and emotions. Thus, one individual should not vary as much from one context to the next, across emotions (i.e., the individual would be just as expressive, irrespective of audience). These hypotheses were not supported by the results. Instead, results suggested that individualism was negatively correlated with inter-individual variability and that

individualism was not correlated with intra-individual variability. Investigators suggested that this was, in fact, due to overall higher expressivity norms in individualistic cultures, allowing the individual to be more uncensored in their overall expressivity.

The research team also predicted in-group versus out-group differences in expressivity norms. They expected to find that all individuals were more expressive with their own in-groups than with their out-groups and this was in fact supported. Also in regards to in-groups, Matsumoto et al. (2008) predicted cultural difference in in-group and out-group expressivity norms, such that individualists would be more expressive of negative emotions to in-groups to a greater degree than would their collectivist counterparts. Individualists were also predicted to expresses more positive than negative emotions with out-groups members. These predictions were partially supported for anger, contempt, and fear where higher scores on individualism were linked to more expressivity of these emotions with in-groups. Individualists were also found to express happiness and surprise more with in-groups than their collectivist counterparts. In all, individualists exhibited higher expressivity norms with in-groups and higher positive expression with out-groups, a finding that was in line with predictions.

The final hypothesis pertained to cultural differences in in-group versus out-group differences. That is, this hypothesis suggested that countries with a higher expressivity norm difference between in-groups and out-groups (i.e., in-group minus out-group) would be more individualistic. This hypothesis was indeed supported by the data. Similarly, it was found that individualists have

smaller differences between how expressive they were with their in-groups and out-groups with positive emotions.

While the Matsumoto et al. (2008) study was extensive in the number of interactants it incorporated and the countries it covered, there were a few suggestions for improvement. In reviewing the study, the manner in which in-groups and out-groups were defined is rather limited. Matsumoto et al. also used Hofstede's country level I/C ratings instead of utilizing the ICIA, which measures individual level I/C. Also, once again, a context of an emotion-eliciting event was not presented to the respondent; rather, they were simply asked if they would show the emotions to the interactant.

Other analysis using subsets of these data have been conducted. One such study, (Matsumoto & Yoo, 2005) examined the correlations between the five display modification options (expression, deamplification, amplification, qualification, and masking) and country level ratings of I/C. Expression was positively correlated with individualism as was the modification option of de-amplification. Negative correlations between individualism and the modification options of qualification, masking, and amplification were also noted.

Palaniappan et al. (2005) conducted additional analyses on a subset of these data in order to answer a different set of questions. Using the data from Malaysian participants (496 female, 120 male), they examined the impact of domain (e.g. being at home versus at a public restaurant) on expressivity of the targeted emotions with the following interactants: alone, with one's father, mother, elder brother, elder sister, younger brother, and younger sister

(Palaniappan et al., 2005). Collapsing across interactants, mean differences across domains were significant for all seven emotions (anger, contempt, disgust, fear, happy, sad and surprise). When interacting with one's father, mean differences reached significance for all emotions, save anger, suggesting that participants tended to suppress emotional expression with their fathers more so than with their mothers. Interestingly, means indicated that participants were more likely to show emotions in public than in private. Mean differences across domains were not statistically significant for anger, suggesting that anger was equally as likely to be expressed in both domains. The same pattern was replicated when interacting with mothers.

In short, display rule research suggested that there are cross-cultural differences. The research further suggested that, in general, these differences may be in part explained by cultural tendencies in I/C. (Matsumoto et al., 2008). Additionally, these rules vary across social groups (e.g., in-groups verses out-groups) and interactants (e.g., family, colleagues) (Matsumoto et al., 1998).

One of the major shortfalls of the extant literature has been the absence of an emotion eliciting event. Also results indicated the need for further investigation of gender differences and consideration of further refinement of the manner in which cultural differences are categorized (Matsumoto et al., 1998; Matsumoto et al., 2008).

Gender and display rules. Matsumoto's collaborators have undertaken the task of examining some of the questions surrounding gender and emotional expression. Using the revised version of the DRAI (Matsumoto, 2008), these

collaborators have begun the process of mapping the interplay between respondent, gender, relationship of the interactant, and social context. Several of these studies are reviewed in the following section. It should be noted that the findings from these studies were disseminated as poster session presentations and thus are limited in detail.

Rooted in the work of Matsumoto et al., (1998), Sunar and colleagues (2005) examined gender differences within the DRAI with a sample of Turkish university students. Turkey is known to be a collectivistic nation, and the study found its university student sample to be more moderate in their Hofstede rating as compared to the non-student population. Yet, gender differences yielded in the analysis of the DRAI data are informative.

The DRAI was administered to 235 (151 female, 84 male) college students in which participants were queried on their display behavior regarding seven emotions with a list of 21 interactants in two social settings (private and public). Of the five display rule options (amplify, express, neutralize, deamplify, qualify, and mask) presented to respondents, the study reported on the neutralization of fear and the deamplification of disgust, happiness, and surprise. The researchers reported an absence of gender differences in the remaining emotion-display option categories.

In regards to the expression of fear, results indicated that male participants tended to neutralize fear more than female participants. This was noted to be particularly true when the gender of the interactant was taken into consideration. Male respondents neutralized their own fear response more often with female

interactants than with male interactants, while, to a lesser extent, female respondents neutralized more often when with male interactants than with female interactants.

When factoring in social context (i.e., being in public verses private situations), males neutralized fear most often when in public. This was particularly true when interacting with members of the opposite sex. Male respondents neutralized the least when in private with a male interactant. Female participants neutralized fear most in a public context with a male interactant and least in private with a female interactant.

Gender differences were also noted in the use of demaplicfication. Here, as noted with fear, the social interactant's gender also seemed to have a significant influence over the display behavior of the respondent. Overall, both male and female respondents reported deamplification of disgust, happiness, and surprise expression when interacting with males.

When factoring in social context (i.e., public verses private situations), both genders were found to deamplify disgust more in private across gender lines. In regards to happiness, males deamplified feelings of happiness more in public than in private across interactants. However, female respondents were found to deamplify happiness in their interaction with males across both social contexts. Finally, male and female participants tended to deamplify surprise expressions to a greater extent in public than in private across interactants.

Taken together, these findings suggested some overall gender differences. Furthermore, consistent with Matsumoto et al. (1998), both males and females

tended to neutralize and deamplify to a greater extent with male interactants. While the gender of the respondent had some important effects on its own, they were greatly modified by the gender of the interactant context. Lastly, gender differences were not noted for amplification, masking, or qualification.

Palaniappan et al. (2005) also looked at the question of gender differences in Malaysian participants. They examined differences in expression of emotion (anger, contempt, disgust, fear, happiness, sadness, and surprise) in seven instances (alone, with father, with mother, with older brother, with older sister, with younger brother, and with younger sister) using five display options: amplify, express, deamplify, qualify, and mask.

According to Palaniappan et al. (2005), when comparing expressivity behavior across social contexts (i.e., in private vs. public), males tended to mask the targeted emotions when in private, save for happiness, as compared to their female counterparts. Males were also found to mask their fear and surprise expression in public as compared to females. Males and females tended to show similar emotional expression when interacting with fathers except in the case of happiness. In these instances, females tended to amplify their emotional expression irrespective of social context. In contrast to how females behave with their fathers, when interacting with the mother, males tended to mask anger, contempt, fear, happiness and surprise. In private, these same expressions were qualified with a smile as compared to female participants. In public, males were also found to mask their feelings toward their mothers when feeling happy.

In regards to expressive behavior with older brothers in private, males appeared to mask or qualify their emotional expression with a smile when expressing anger, fear, happiness or surprise as compared to females. Similar results were noted for the expression of fear and happiness for males interacting with an older brother in public as compared to their female counterparts. Males and females also differed in their display behavior toward an older sister in both social contexts. In interacting with younger brothers across social context, males were found to have the propensity to mask feelings of happiness and surprise in comparison to female participants. This was also the case for male participants interacting with younger sisters, in which they were also found to mask fear more so than their female counterparts.

In all, results on gender provided an extension to the early work done on display rules. It highlighted the importance of factoring in the intricacies of not only the social relationship of the interactant but the genders of the interacting partners as well as the location of interaction. Still, one of the major shortfalls of the extant literature has been the absence of an emotion-eliciting event. Taken with the need to further refine the manner in which cultural differences are categorized, much works remains to be done.

Religion: The Forgotten Dimension

More recently, there has been a shift away from characterizing cultures as individualist or collectivist (Mesquite & Leu, 2007; Osyersman et al., 2002). Recent scholarship has suggested moving beyond the predominant typologies in the literature to looking at other influences that may shape emotional responding across cultures. The influence of religious beliefs and practices, for example,

have profoundly affected the shapes of civilizations and cultures throughout history (Emmons & Paloutzian, 2003; Tarakeshwar, Santon, & Pargement 2003). Yet, the interplay between religion and culture has been overlooked in cross-cultural research.

Tarakeshwar et al. (2003) suggested four reasons for the integration of religious dimensions in cross-cultural studies: (a) to varying degrees, religion has always been a salient force in peoples' lives across cultures; (b) religion has been found to be a significant predictor of important variables, such as overall physical and mental health, across multiple cultures; (c) religion can be predictive of several important cross-cultural dimensions (e.g., the importance of traditionalism, conservatism, communism, conformity); and (d) cultural forces can be an influence on religious beliefs and practices. For example, Islamic rituals in Pakistan are influenced by the indigenous culture of the Indian subcontinent, whereas American Muslims are touched by the ethos of the Western society in which they reside.

Given the influence of religion on cultural practices and the influence of culture on emotions, this dissertation study seeks to further consider the relationship between religiosity, culture, and emotions. Here, a cursory review of Islam, the chosen religion for the dissertation investigation, serves to facilitate further discussion.

Islam. The word "Islam" itself means submission to the will of God in order to achieve peace (Khan, 2003). At the most basic level, this *submission* means the belief in one God and only one God, a recognition that only He is

worthy of worship, and a complete submission to his will and laws, which, in turn, helps one realize one's position in the universe and in God's plan. According to Islamic theory, each individual's destiny (e.g., the amount of wealth one will accumulate, number of children one will have, one's happiness and one's death) are predetermined by God. Individuals, however, do have control over their individual deeds. The accumulation of such deeds are said to determine entrance into the afterlife on the day-of-judgment. In Islam, an individual spends his or her life becoming a worthy member of society.

There are five basic requirements according to Islamic theology, referred to as the Five Pillars of Islam. The first of these is to declare belief in one God, followed by five daily prayers, fasting during the month of Ramadan, giving alms to the poor (2.5% of wealth annually), and performance of Hajj, the pilgrimage to Mecca.

Additionally, Muslims are to choose right over wrong, fulfill the rights of human beings (i.e., all humans are expected to be treated fairly and as equals), accept the fundamental beliefs of Islam, and implement Islam's moral and ethical standards of living (Khan, 2003). In this sense, Islam is generally regarded as a collectivistic religion, one which espouses values such as empathy, group unity, brotherliness, cooperation, integrity, patience and steadfastness, importance of family, social responsibility, and participation in worldly affairs, in addition to religious obligations (Cukur, Guzman, & Carlo, 2004; Khan, 2003; Obeid, 1988). Islam's tenets provide a day-to-day guide on the manner in which Muslims should lead their lives, including their duties, rights, and responsibilities toward Allah

(God), parents, family, friends, neighbors, other members of the ummah (the larger Muslim community), and non-Muslims (Cukur, Guzman, & Carlo, 2004; Khan, 2003; Kobeisy, 2004; Tarakeshwar, Santon, & Pargement, 2003).

Quranic teachings strongly emphasize respect for parents and familial and non-familial elders (Khan, 2003; Kobeisy, 2004; Sherif, 1995). A Muslim's first obligation is to family (parents, spouse, children) and then to other relatives, neighbors, friends and acquaintances, orphans and widows, the needy of the community, other Muslims, other humans, and animals (Khan, 2003; Obeid, 1988; Obeid & Thomas, 1988; Sakr, 1995; Zaman, Stewart, & Zaman, 2006).

Most religions address, to some extent, the issue of emotions—both in how they are achieved and controlled—and some even describe methods for handling theologically problematic emotions (such as anger and pride). Islam is no exception (Emmons & Paloutzian, 2003).

Islam emphasizes humility, control of passions and desires, and the avoidance of anger, pride, and envy, which are believed to lead to emotional instability and anxiety (Happiness in Islam, 2008; Moral System of Islam, 2008; Obeid, 1988). References regarding specific emotions can be found in the teachings of the Quran and its hadith (the record of the saying of the Prophet Muhammad).

For example, when meeting friends, an Islamic scholar writes that a Muslim should "have cheerfulness of the face, kindness of the tongue, largeness of the heart, outspreading the hands, withholding anger, leaving off pride, keeping people's honor in mind and showing happiness at their companionship and

brotherhood" (Al-Bosnee, 2008). Al-Bosnee went on to cite hadiths that describe the importance of greeting all people with a warm, smiling face that communicates a pure soul and sincerity on behalf of the greeter:

> Islam wants the ties of friendship and brotherhood/ sisterhood to remain strong among the Muslims, so it encouraged them to spread salam [peace], to be cheerful of countenance, to speak gently and to greet one another warmly, so that hearts will remain pure and open, ready to work together in kindness to do good deeds, and capable of carrying out the duties of Islam no matter what effort and sacrifices may be required (Al-Bosnee, 2008)

Adherence to the Muslim way of life and submitting to the teachings of Allah and his prophet are believed to be crucial to the attainment of happiness. As such, making your parents happy will make God happy, which, in turn, will make you happy.

Anger and displays of anger are strongly discouraged by the teaching of the Quran and hadiths. The Quran states, "Those who spend (in Allah's cause) in prosperity and in adversity, who repress their anger, and who pardon men, verily, Allah loves the al-Muhsinun (the good-doers)" (Surah Al-Imran (3): Ayah 133-134). Similarly, the hadith Al-Bukhari states, "A strong person is not the person who throws his adversaries to the ground. A strong person is the person who contains himself when he is angry" (Al-Bukhari). Here the hadiths suggest that the angry should take measures to control their anger in all instances by removing

themselves from the situation, keeping silent, or with prayer, and so on. It is further suggested that when an argument ensues between friends that it is permissible to remain angry for up to three days before amends must be made (Advice on Dealing with Anger, 2008; Al-Bosnee, 2008; Obeid, 1988).

Similarly, pride in oneself or one's material possessions is strongly discouraged and considered to be one of man's worst attributes. "God is Beauty and delighteth in the beautiful; but pride is holding man in contempt." The Prophet said, "He who has in his heart the weight of an atom of pride shall not enter Paradise" (Al-Muslim). Hadiths, Al-Bukhari and Al-Muslim, also report that the Prophet said, "Allaah [sic] will not look on the Day of Judgment at him who drags his robe (behind him) out of pride." Muslims are reminded that they are creations of Allah, are to submit to his will, and are to demonstrate kindness, respect, humility, and honor and reverence is to be reserved for the righteous and the devout.

This short review of Islamic theology demonstrates that Islam addresses emotions, their value, and offers guidelines by which they should be handled. Islamic values are seemingly more congruent with collectivism; however, the link between Islam and collectivism has not been examined formally. Although there are many Islamic countries in which one might further investigate this relationship, the Islamic Republic of Pakistan is one that has reached the forefront of international news and local headlines in the past decade and will serve as of the settings for this study.

Pakistan: A Country Profile

Bordered by India on the east, Iran to the west, and Afghanistan to the north, Pakistan managed to stay out of the international limelight until recent years. Despite its recent emergence on the international scene, there remains a lack of formal psychological understanding of Pakistanis or Pakistani life in western literature. That Pakistan is both an Islamic state and collectivistic makes it a particularly well-suited subject for the dissertation study.

The Pakistani way of life has been largely influenced by the rich history of the Indian subcontinent, particularly the partition of India during the mid-twentieth century. Historians have agreed that Islamic settlements in India were established through several campaigns: a military invasion in 711 AD, the Ghazni raids during the 11th century, the slave dynasty in the 13th century, and the arrival of the Mughals in the 15th century (Blood, 1995; Bukri, 1999; Cohen, 2004; History in Chronological Order, 2008; Khan, 2003).

Given Pakistan's geographic location and the nature of Islam's expansion through the region, it has been a crossroads between the Arab world and Eastern civilizations. Over time, Muslims of Arab origin brought with them their traditions just as new Muslims retained some of their Hindu customs, integrating them into a new system of traditions (e.g., in Islam widows are permitted to remarry, whereas in traditional Indian practice widows are relegated to the margins of society) (Qadeer, 2006; Zaman, Stewart, & Zaman, 2006).

Pakistan was born out the struggle of India to free itself from British rule. It was during this time that the idea of a separate Islamic state was first conceived by Muslim leaders who were disillusioned by a lack of influence in the Hindu

majority government (Blood, 1995; Bukri, 1999; Cohen, 2004). At the time of partition, the territories of Pakistan were determined by a report commissioned by the British, which drew national boundary lines based on population density by religion. Consequently, 1947 proved to be a year of mass swapping of populations between the nascent countries. The people of modern day Pakistan found themselves with new neighbors to whom they were united by faith, yet not necessarily in traditions, customs, or language.

Today, Pakistan is divided into 4 provinces: Sindh, Punjab, North West Frontier Province, and Baluchistan. It is a multilingual state; however, Urdu is the national language and English is the official language of the constitution and government. Karachi is Pakistan's largest city and commercial-industrial center as well as its main port. Ninety-seven percent of Pakistanis are Muslim, and of those 77% are followers of the Sunni sect of Islam (Mohiuddin, 2007a).

In Pakistani society, there is a high regard for traditional family values with the extended family system being the norm rather than the exception. As such, social life revolves around one's family, which is the basis for social organization.

While variations exist, the predominant family structure is hierarchical with traditional gender roles in place. Children live with parents until they are married; however, married sons often choose to remain in their familial home with their wives and children. Unmarried, widowed or divorced daughters and paternal aunts may also reside in the familial home. In this sense, Pakistani families are patrilineal and patrilocal, in which wives are expected to move to the

husband's area of residence (Avan, Rahbar, & Raza, 2007; Jejeebhoy & Sathar, 2001; Mohiuddin, 2007a; Qadir et al., 2005).

Power and status within the immediate and extended family are specified by type of kinship, as is evidenced by the titles that are used for these relatives. Each title is unique and rich with relational and power information. For example, *khala* is one's mother's sister; *puphee* is one's father's sister, and *fui* is one's father's eldest sister. Any elder, even elder sibling and cousins, are referred to with titles equating to brother or sister that is indicative of respect (Mohiuddin, 2007a). Rules of address, in line with Islamic thought, are further indicative of a hierarchical family structure.

Wisdom is attributed to age; therefore grandparents and other elders in the immediate and extended family command respect and loyalty. The last word will always be that of the eldest in the house. Open expression of negative feelings toward parents and elders is frowned upon and not accepted in Pakistani families.

Like other collectivistic cultures, Pakistanis place great value on obedience and the fulfilling of duties and obligations of individuals. Parenting promotes respect of elders, interpersonal harmony, and stresses mutual interdependence rather than individual autonomy. Children are taught reverence for all elders and people older than them from an early age. Parents are to be loved, respected, and obeyed. This respect of elders extends beyond the family system in Pakistan. The elderly are given more consideration than anyone else in Pakistan. For example, when in a group of people, the elderly are expected to be acknowledged first; similarly, at the dinner table the elderly are served first.

Elders are never referred to by their names—instead titles such "aunty" and "uncle" are used. Non-familial elders who are in power positions, such as bosses and teachers, are referred to as "sir" or "madam." Moreover, these titles are used in both formal and informal settings. For example, a student encountering his teacher outside the school setting would still employ the formal title, even if the individual was no longer the student's teacher.

Urdu language reflects the hierarchical social structure where there are both social class and age connotations. For example, the pronoun "you" has three differentiations in Urdu: *aap*, *tum*, and *too*. *Aap* is formal and used for relatives, family, friends, neighbors older than oneself, strangers, employers, and those of high status. *Tum* is used when talking to someone of the same age or younger and friends. Finally, *Too* is now used mostly by low income and uneducated people, although it used to be used in references to low class people. While these are the formal rules, variation exists amongst the population depending on level of education and blending of rules by those who are multi-lingual.

Socially, Pakistanis try to follow the teachings of Islam. Visitors to the home are always welcomed and the full hospitality of family is extended. Guests are always offered food and drink, with the best the family has being offered to the guests first. Similarly, out-of-town visitors are offered the best accommodations in the home. It is considered a great insult for visiting relatives to stay at a hotel. Few Pakistanis value privacy and personal space the way that Westerners do. As such, it is common to assume that guests will not require or expect privacy within the host home. Similarly, most Pakistanis have an "open

door" policy; others are welcome and encouraged to stop by and enjoy a meal or a cup of tea without having made prior plans.

In accordance with Islamic tradition, modesty and humility is expected of all. It is inappropriate to brag about one's accomplishments and material possessions or to make self-congratulatory statements. It is also inappropriate to look into the eyes of elders when speaking to them, and "in fact the humble demeanor and the facial expression showing the relevant sentiments serve as substitutes for please, thank you, and sorry when addressing elders" (Mohiuddin, 2007b)

Recent decades have seen the emergence of a middle class in cities like Karachi, Lahore, and Rawalpindi that wishes to move in a more liberal direction. The northwestern regions bordering Afghanistan, nonetheless, remain highly conservative and dominated by centuries-old regional tribal customs. In recent years, urban families have grown into a nuclear family system, in part due to the socio-economic constraints imposed by the traditional joint family system. This change finds more women in higher education and in the work force. The advent of globalization has amplified the influence of Western culture with Pakistan ranking 46th on the Kearney/FP Globalization Index while being type-cast as collectivistic. Given this changing landscape and the dearth of formal investigation of Pakistani people, the dissertation study sought to provide much needed scholarship.

Rationale

The dissertation study investigated cultural differences in the construction of emotion-eliciting events and the associated display rules for exhibiting the

elicited emotional response to others. Existing literature, though inconclusive, suggested that antecedent events would be expected to vary across cultures, with more relational themes being noted in the collectivist context (Boucher & Brandt 1981, Mesquita, 2001; Scherer et al., 1988). This dissertation study sought to confirm such differences by asking respondents to elicit events that are reflective of their values and way of life.

Similarly, display rules have been found to vary across the cultural categories of I/C, with expressivity of emotions being different for in-group versus out-group members (Matsumoto et al., 2008; Matsumoto et al., 1998). Given the demonstration that I/C is not a unidimensional construct, and given that situational contexts, gender, and relationships between social interactants may be pertinent to outcomes (Lutz, 1987; Masuda et al., 2008; Matsumoto et al., 2008; Palaniappan et al., 2005; Sunar et al., 2005; White, 1990), the dissertation study extended previous methodologies by examining the effects of social contexts in so far as they determine display behavior. This dissertation study, therefore, incorporated situational contexts by asking respondents to construct an emotion-eliciting event. Furthermore, with suggestions for a more multifaceted approach to cultural categorization, this study examined the role of religiosity on expressivity of emotion within different social contexts (Emmons & Paloutzian, 2003; Mesquite & Leu, 2007; Osyersman et al., 2002; Tarakeshwar, Santon, & Pargement 2003).

Lastly, until now, emotion researchers have largely neglected the Pakistani population. With evidence suggesting that not all collectivist cultures hold

identical priorities in values and with little pre-existing literature on Pakistan, this study worked toward improving understanding of the Pakistani people and their culture. Thus, the investigation served as the first to map individual level individualist and collectivist tendencies using the ICIAI in Pakistan.

Statement of Hypotheses and Research Questions

Hypotheses

The following section presents the five hypotheses and two research questions pursued in this study.

Hypothesis I. Pakistanis will score higher on collectivism, as measured by the ICIAI, than will Americans.

Hypothesis Ia. Pakistanis will be more collectivistic with family, friends, and colleagues in each scale (values and behavioral frequency). Consistent with the reviewed literature, Pakistanis will be individualistic in nature when considering their values towards, and behaviors with, strangers who are not part of their in-group.

Hypothesis Ib. Pakistanis will score higher on collectivism for all four subscales of the ICIAI (Social Identification, Self-Control, Social Harmony, and Social Sharing Recognition) when interacting with family, friends, and colleagues, which will be consistent with their collectivistic nature. Once again, this will not be the case for strangers who are not part of their in-group.

Research Question 1: Are there within and between country differences in gender in the measurement of I/C, as measured by the ICIAI?

Hypothesis II. Pakistanis will construct emotion-eliciting events that are more consistent with ideals and values associated with collectivism than will Americans.

Pakistanis will write stories that will be scored as more collectivistic. That is, these stories will demonstrate collectivistic values such as group cohesiveness, working for group goals, developing and maintaining group cohesion and

cooperation, being a good team player, avoiding conflict with in-group members, interpreting events in terms of their impact to the greater group, and sharing news—good and bad—with in-group members when it serves to increase group cohesiveness.

Hypothesis III. American participants will construct emotion-eliciting events that are more consistent with individualistic values than will Pakistanis.

In other words, Americans will construct stories that are scored as more individualistic. That is, these stories will demonstrate individualistic values such as developing and fulfilling personal goals and desires, demonstrating the need to be independent, prioritizing personal happiness and needs, emphasizing self-expression, interpreting events in terms of their impact on them and their needs/goals, and competitiveness amongst in-group and out-group members. These values are not predicted to vary across relationship hierarchies or across gender lines.

Hypothesis IV. Expressivity will vary by the social context of the story. Pakistanis will be as emotionally expressive as their American counterparts in social bonding contexts (i.e., stories that describe social bonding in which the expression of an emotion would be considered to enhance the relationship between interacting partners). Conversely, in contexts within which the expression of the felt emotion would foster discord, Americans will be more expressive with all emotions (see Table 1).

Table 1.

Hypothesized Cultural Differences in Expression of Emotion by Story Context

Emotion	Socially bonding stories	Socially disruptive stories
Sadness	EA = PAK	EA > PAK
Happiness	EA = PAK	EA > PAK
Pride	EA = PAK	EA > PAK
Anger	EA = PAK	EA > PAK
Shame	EA = PAK	EA > PAK

Research Question 2: Are there cultural differences in the frequency of display options that are selected for use?

Respondents will be presented with seven display options (i.e., show more sadness than you feel, express your sadness just as you feel it, show less sadness than you actually feel, show your sadness but with another expression, hide your feelings of sadness by showing nothing, hide your feelings of sadness by showing something else, and other (open-ended response option)). Research question two will investigate frequency differences in the use of these options, between and within each cultural group as well as along gender lines.

Hypothesis V. A religiosity survey constructed for this study will be found to be valid and reliable within the Pakistani sample and also the European American sample.

Optional Hypothesis and Research Questions

While the following research questions were of interest, addressing them was dependent on the quality and quantity of data collected.

Optional Hypothesis VI. A positive correlation between religiosity and collectivism will be found across cultures.

Optional Hypothesis VIa. Positive correlations will be noted between religiosity and each of the subscales of the ICIAI, within each scale (i.e., values and behavioral frequency).

Optional Hypothesis VIb. Positive correlations will be noted between religiosity and each of the four target groups (i.e., family, friends, colleagues, and strangers) of the ICIAI, within each scale (i.e., values and behavioral frequency).

Optional Research Question 1: Are there other themes or values that can be used to describe the two cultures of interest?

Qualitative data is well-suited to theory development. Thus, emotion stories can be used to determine the existence of additional themes and/or values that may inform an understanding of Pakistanis in contrast to their Americans counterparts.

Optional Research Question 2: Do display rules vary across relationship hierarchies and gender?

Data will be inspected for suggestions of varied expressivity patterns across different relationships. It is thought that the hierarchal structure of Pakistan will encourage expressiveness of felt emotion toward younger and female relatives more so than with elder and male relatives.

Optional Research Question 3: What is the influence of religiosity on the types of emotion eliciting-events that are constructed?

Since religion is central to the lives of Pakistanis, it is logical to assume that its influence will be noted in the manner in which individuals interpret and find meaning in events.

CHAPTER II

METHODS

Chapter two presents a description of the qualitative and qualitative methods used to inform the hypotheses and research questions posed in Chapter one. The research participants are described in the first section of the chapter followed by a discussion of both the research-based, validated metrics used in the study and the newly constructed measures and procedures used to collect the data. A discussion of how the collected data were processed and scored prior to conducting statistical analysis is presented here as is a description of the logistics of confidentiality, data storage, and data transportation.

Research Participants

The participants in this study included 133 United States (U.S.) college students and 115 Pakistani college students. The U.S. sample consisted of DePaul University undergraduate subject pool members. Students enrolled in Introductory Psychology courses at DePaul University are required to participate in research studies as a part of the course completion and are members of the undergraduate subject pool. Thus all participants recruited through the undergraduate subject pool received course credit for participation.

The Pakistani participant pool was predominantly recruited from various college campuses in Karachi, Pakistan. The principal investigator contacted numerous professors through a variety of personal and professional networks to gain cooperation before arrival in Karachi, Pakistan. Additional contacts were

made upon arrival through a variety of social connections (See Appendix A and B for recruitment materials).

The majority of the Pakistani respondents were undergraduate students enrolled in a business ethics course at Iqra University, Karachi, Pakistan. A second group of students was enrolled in a philosophy course at Karachi University, Karachi, Pakistan. Smaller numbers of participants were recruited from School of Business Studies (SBS), Karachi, Pakistan, Lahore University of Management Sciences (LUMS), Lahore, Pakistan, and College of Business Management (CBM), Karachi, Pakistan.

English is used as the language of instruction in the participating institutions across both countries. Thus, it was presumed that all participants in the study had verbal and written fluency in English.

The study involved undergraduate students from Pakistani and U.S. institutions of higher education that fell within the traditional age range for undergraduate students. Table 2 depicts the age distribution for the Pakistani and U.S. student participants. The average age range for both samples was 18-29; 84% of Pakistani participants were between 18-22 (Pakistani: $M = 21$, $SD = 2.0$) years of age and similarly 87% of the U.S. sample ranged in age of 18-22 ($M = 19.8$ $SD = 1.9$).

Table 2.

Mean Age of Respondents by Country

Country	Number	Mean	SD
Pakistan	113	21.0	2.0
USA	129	19.8	1.9

Both the Pakistani and American participant groups had a higher rate of female participants (56% Pakistani, 78% American). However, this difference is more pronounced in the U.S. sample in which 78% of the sample is female as depicted in Table 3.

Table 3.

Gender Distribution of Respondents by Country

Country	Male	Female
Pakistan	50	65
USA	27	101
Total	77	166

The majority of U.S. participants reported living with friends or a roommate while the majority of Pakistani respondents reported living with family

(see Table 4 for detailed distribution). One U.S. respondent and three Pakistani participants reported being married.

Table 4.

Living Situation of Respondents by Country

	Pakistan		USA	
	N	%	N	%
Living with Friends	1	0.9	31	24.6
Living Alone	2	1.8	7	5.6
Living with Family	109	96.5	39	31.0
Living with a Roommate			46	36.5
Living with Significant Other/ Spouse			3	2.4
Other	1	0.9		
Total	113	100.0	126	100.0

Most of the U.S. respondents identified themselves as being White (60%); however, there was a substantial sample of Hispanic Americans (20%), as illustrated in Table 5 below. It should also be noted that approximately 9% of the U.S. sample identified themselves with an ethnic identity that is most often considered collectivistic in the literature (i.e., Arab, Afghan, Asian, Middle-Eastern, Indian, Pakistani-American).

Table 5.

Self-Reported Ethnic Identity of U.S. Respondents

Ethnicity	N	%
Arab	2	1.6
Afghan	1	0.8
Asian	5	3.9
Middle Eastern	1	0.8
Indian	1	0.8
Pakistani American	1	0.8
Black	9	7.0
Hispanic	25	19.4
Others	5	3.9
White	79	61.2
Total	129	100.0

Of the Pakistani sample (see Table 6), over half self-identified as simply *Pakistani*, whereas the remaining respondents identified with particular regions found within Pakistan (e.g., Balchi, referring to people of Baluchistan which is

one of the four provinces in Pakistan), ethnic (e.g., Memon's, who are predominately of Sindh, Kutch or Kathiawar origins), or religious (e.g., Ismalis follow the Ismali branch of Shiaism) identities.

Table 6.

Self-Reported Ethnic Identity of Pakistani Respondents

Ethnicity	N	%
Balochi	1	0.9
Bori	1	0.9
Ismali	1	0.9
Memon	2	1.8
Muslim	1	0.9
Pakistani	65	57.5
Punjabi	10	8.9
Sindhi	5	4.4
Urdu Speaking	21	18.6
Pakistani/Shia	1	0.9
Pashtooh	1	0.9
Punjabi/Urdu Speaking	1	0.9
Urdu Speaking	3	2.7
Total	113	100.0

Additionally, when asked about time spent outside their home country, similar percentages of respondents in each country reported having traveled

outside of the country for some period of time. Travel is known to expose people to cultures and worldviews that are different from their own and thus, may have an interaction effect on the selection bias and the experimental variables (a threat to external validity). At the onset of the study this was particularly concerning for Pakistani participants since traditionally individualistic societies such as the United Kingdom, Canada, and the United States are frequent travel destinations.

Parents' level of education was also collected from respondents. Over 30% of the mothers in both samples were college graduates. As depicted in Table 7, about 43% of the Pakistani mothers attained a college degree or higher as compared to 54% of U.S. mothers with comparable educational attainment.

Table 7.

Maternal Education by Country

	Pakistan		USA	
	N	%	N	%
Less than 7th Grade	6	5.2	1	0.8
7th to 9th Grade	5	4.3	1	0.8
Some High School/Lower Secondary	12	10.4	5	3.9
High School Graduate/GED	17	14.8	22	17.1
Some College/A Levels	12	10.4	30	23.3
College Graduate	35	30.4	44	34.1
Graduate/Professional School	14	12.2	26	20.2
Other	2	1.7		
Missing	12	10.4		

Total	115	100.0	129	100.0

The participants' fathers' levels of education attainment was quite comparable across the two countries as depicted in Table 8. Similar percentages of respondents indicated their fathers' educational attainment for less than 7th grade, 7th-9th grade, some high school/lower secondary, college graduate and as having graduate and professional degrees.

Table 8.

Paternal Education by Country

	Pakistan		USA	
	N	%	N	%
Less than 7th Grade	2	1.7	2	1.6
7th to 9th Grade	1	0.9	1	0.8
Some High School/Lower Secondary	6	5.2	7	5.4
High School Graduate/GED	19	16.5	29	22.5
Some College/A Levels	10	8.7	20	15.5
College Graduate	37	32.2	39	30.2
Graduate/Professional School	24	20.9	31	24.0
Other				
Missing	16	13.9		
Total	115	100.0	129	100.0

Measures

The measures used for this study involved a demographics questionnaire, a religiosity survey, an individualism-collectivism inventory, a story production task, and a display rule task (See Appendix C for completed study survey). English is widely spoken among the educated classes in urban Pakistan and in the U.S. and was the language of instruction at the all of the colleges included in the study. Therefore, all measures were presented in English to all of the participants. Each of these five measures are described in detail in the following section and are also provided in Appendix C.

Demographics questionnaire. Information such as age, gender, ethnicity, and time spent outside of the participant's home country was collected from each of the study participants as a part of the demographics questionnaire.

Religiosity survey. A religiosity survey was developed in order to investigate each study participant's religiosity, or the quality of being religious, and the strength and influence of religion in the participants' life as well as the degree of participation in religious practices and events. The first item of this scale established the religious affiliation of the respondent. The remaining items, two through seven, were presented in a seven-point Likert scale format (zero = not at all important, seven = very important).

Item two assessed the degree to which respondents considered themselves to be religious. Items three through seven assessed the importance of, and the reference to, religious beliefs in daily life. The last two items were concerned with the amount of time spent on religious practices and events. These items

were presented with a zero-to-five scale (zero indicated no time and five indicated six or more hours per week).

The religiosity scale was constructed after study of similar scales developed by other investigators (e.g., Hill and Hood, 1999). Issues such as the internal consistency of the scale used in this survey and other topics related to the reliability and validity of this measure are discussed in the results section of this manuscript.

Individualism-Collectivism inventory. All participants completed the Individualism-Collectivism Interpersonal Assessment Inventory (ICIAI), (Matsumoto, 1996). This inventory is presented in the form of a questionnaire that consists of two scales, each comprising of 19 behavioral descriptors (e.g., be loyal to them, sacrifice your goals for them). Part one considers how much the respondent values the behavior described and part two considers the frequency with which the behaviors are shown when interacting with members from the four target groups: family, close friends, colleagues, and strangers.

Items in each scale are rated on a seven-point Likert scale. In part one of the questionnaire that measures how much the respondent values particular behaviors, the scale ranges from zero meaning not at all important through six meaning very important. Similarly, in part of two of the questionnaire, the scale ranges from zero meaning that the participant never exhibits a particular behavior when with a particular target group through six meaning that the respondent self-reports that they exhibit a particular behavior all the time with a particular target group.

According to the ICIAI protocol, values are defined as "concepts or beliefs about desirable outcomes or behaviors that guide our selection of behaviors and evaluation of events," (Matsumoto, 1996, page 6) while behavioral frequency is the self-reported use of the listed behavioral descriptors when interacting with each group of persons.

The 19 items are categorized into four subscales: social harmony (nine items, including honor tradition, loyalty, respect for elders, compromise, communication), social identification (four items, including be like them, follow norms established by them, save face for them), self-control (two items, including maintain self-control and exhibit proper behavior with them), and social sharing recognition (four items, including share credit, share blame) (See Appendix D for ICIAI subscale items). Higher scores on the ICIAI indicate a greater sense of collectivism while lower scores indicate a greater sense of individualism. Computed Cronbach's alpha, standardized item alphas, and item-total correlations for each of the 32 scale scores were within the range of acceptability, ranging from a low of .4948 to a high of .9117; average alpha = .699, average standardized alpha = .703.

Story production task. Respondents were asked to construct vignettes describing situations in which they have experienced five emotions: sadness, happiness, pride, anger, and shame. The instructions emphasized that the story should reflect the values and behaviors of persons from their culture in an interaction with one other social partner (see Appendix C for text of instructions). The inclusion of a social interactant served a dual purpose; namely it provided the

opportunity to examine values and behaviors involving a social interactant, and secondly, it did so in the absence of confounds that additional interactants might present.

Display rule data. As a follow-up to the preceding section, respondents were asked to complete two follow-up questions regarding the emotional expressiveness of the elicited emotion in each constructed story. The first item queried the likelihood of the participant's emotional expressiveness on a seven-point scale (i.e., in the situation you described, how likely are you to show your emotion, as you feel it, to the other person?). In the second item, respondents were presented with a list of seven display options taken from Matsumoto's Display Rule Assessment Inventory (Matsumoto, Yoo, Hirayama, & Petrova, 2005): show more sadness than you feel, express your sadness just as you feel it, show less sadness than you actually feel, show your sadness but with another expression, hide your feelings of sadness by showing nothing, hide your feelings of sadness by showing something else, and other. The choice *other* provides an open-ended response option.

Procedures

Measures were presented to U.S. participants in an online format following procedures established for data collection by DePaul University's Psychology department. In Pakistan, however, participating classrooms were presented with the option of either a hardcopy version or an online version of the measures to accommodate variabilities in access to technology as well as administration preference of the host. The validity of using such multi-method data collection methods has been well documented by Birnbaum (2001).

All appropriate consent was secured from the participants according to the procedures established by DePaul's Institutional Review Board (IRB) committee in compliance with the rules and regulation set by the Federal Office of Human Research Protection in the United States. Contact information for the principal investigator of this study and the DePaul IRB committee was included on the active informed consent form.

Online participants were given the opportunity to contact the principal investigator if they had the desire to do so before opting to participate. Participants taking the paper and pencil version of the measures were also given the opportunity to ask for clarification from the study administrator. Regardless of the form of the measure, all participants were provided with the option to opt out of the study.

Study measures were presented in the following order: Demographic Questionnaire, Religiosity Survey, ICIAI, and, lastly, the Story Production procedure. For the online version, participants had to complete all non-optional items before moving forward to the next section. This was not the case in the hardcopy version, in which participants had the capability of moving backwards to revise answer choices, if they opted to do so.

Data Processing and Scoring

This section provides a description of how the data collected through the five different measures were processed and scored.

Demographic data. Collected demographic data served several purposes including data selection and data description. Demographic data were examined

for homogeneity of groups, how individuals interact with others, individual's religious affiliation and practices, an individual's tendency toward individualism or collectivism, and likeliness of an individual's emotional expressiveness among different target groups.

Demographic data such as each of the participant's age and ethnicity were used to ensure that the people involved in participant groups were similar in age, and representative of the typical college age, as well as those who were of the target ethnic groups. Questions regarding participant socio-economic status were used to determine heterogeneity of groups both within and between groups.

Additionally, all of the demographic variables included in the survey items were used to describe the final sample of research participants who took part in the study. Topics related to the demographic variables are also involved in the discussion of study results found in Chapter Five.

Individualism-Collectivism inventory. The Individualism-Collectivism Interpersonal Assessment Inventory (ICIAI) involves measuring values and behaviors related to how individuals interact with others. Interactions with others are measured within four social group types: family, close friends, colleagues, and strangers. Interaction with each social group is also measured in four different rating domains: social harmony, social identification, self-control, and social sharing of recognition.

The ICIAI tool produces two scores. First, the *scale scores* measure values and behaviors for each social group and rating domain. The higher the scale score for measured values, the likelier the measured value guides behaviors

expressed during interactions with others. Also, the higher the scale score for measured behaviors, the more often the individual will engage in a particular behavior when interacting with others. Second, the *general individualism-collectivism (IC) indices* (Matsumoto, 2005) are an average of all scores within each social group and domain. For example, a general IC score for Values with Family and a General IC score for Values with Friends. The higher the general IC scores, the more likely the measured values and behaviors are related to how an individual interacts with others.

Furthermore, ICIAI produces two scores: (a) a general indices of raw IC scores for each social group (family, friends, colleagues, and strangers) and rating domain (values and behaviors) by averaging across all 19 items within each social group and domain (with reverse scoring of item 17) and (b) scaled scores that are averaged case scores (as opposed to raw scores), including social identification, self-control, social harmony, and social sharing recognition that are produced for each social group and rating domain (values and behaviors).

Religiosity. There are eight items on the religiosity survey used to create a religiosity scale. Item one on the survey ascertained the religious affiliation of the respondent. Item two queried the religiousness of the respondent and was used to determine criterion validity. Items three through eight were averaged to construct one religiosity score.

Story production. Stories collected via paper and pencil measures were transcribed into an electronic format and combined with those collected electronically into one excel data file. With the end goal of categorizing stories as being either more representative of collectivist values or individualist values, an *a priori* coding

methodology was proposed following the deductive qualitative content analysis method (Cho and Lee, 2014). A list of 52 *a priori* value codes with descriptions were identified based on based on prior research that defines the values associated with the two cultural constructs (e.g., Work for betterment of in-group: Instead of focusing on individual successes members of an in-group work towards attaining well-being and success for the entire group) (for complete list of codes and description, see Appendix F). However, multiple revisions became necessary to the coding procedure as reliability between raters was problematic. This included, but was not limited to, revisions to and consolidation of the *a priori* codes as well as the retraining of the raters. These attempts and sequence of methodologies are detailed in Appendices E-G. It should be noted that raters were blind to that author's country of residence and gender when coding.

After detailed discussions with the Committee Chair, a decision was made to pursue thematic consensus coding between the primary investigator and committee chair (Bruan & Clarke, n.d; Marks & Yardley, 2004). Following the coding instruction as laid out in Appendix H, they grounded their coding in their understanding of the constructs of individualism and collectivism. Stories were coded as either representing IND or COL values and stories that could not be coded were categorized as N for not categorized. Reliability was attained on a subset of stories across all emotions. With reliability attained (See Table 9), the principal investigator continued to code the remaining stories. Checks were complete on subsets of stories to protect against drift and to ensure consistency. Additionally, the principal investigator flagged and reviewed with the committee chair any stories that were particularly ambiguous or for which further guidance was needed. These more ambiguous stories were reviewed and coded jointly. Additionally, coding instructions were updated to include any new clarifications (e.g., decision that a roommate is not a part of in-group).

Table 9.

Final Story Coding Method with Kappa Calculations

		Reliability stories (N = 10)				Combined (Subset 4 with drift check) & reliability stories (N = 24**)**		
Kappa Calculations								
		Fatani/Camras				Fatani/Camras		
Sad		I	C	N		I	C	N
	I	0	0	0		1	0	0
	C	0	9	0		0	21	0
	N	0	0	1		0	0	2
				1				1
		Fatani/Camras				Fatani/Camras		
Happy		I	C	N		I	C	N
	I	5	0	0		10	0	0
	C	0	5	0		0	14	0
	N	0	0	0		0	0	0
				1				1
		Fatani/Camras				Fatani/Camras		
Anger		I	C	N		I	C	N
	I	2	0	0		7	0	0
	C	1	5	1		1	12	2
	N	0	0	1		0	0	2
				0.65				0.78
		Fatani/Camras				Fatani/Camras		
Pride		I	C	N		I	C	N
	I	3	0	0		8	0	0
	C	0	7	0		0	15	0
	N	0	0	0		0	0	0
				1				1
		Fatani/Camras				Fatani/Camras		
Shame		I	C	N		I	C	N
	I	6	0	0		9	0	0
	C	1	2	0		1	10	0
	N	0	0	0		0	1	1
				0.73				0.84

Additionally, where available, interactants (e.g., family, friends, colleagues, strangers, or missing (n/a)) were identified for each story and stories

were coded as socially bonding or socially disruptive. Socially bonding stories were defined as those in which expressing the felt emotion served to create or maintain a positive bond between the two social interactants. Socially disruptive stories were those in which the expression of the felt emotion served to disrupt the harmony between the two interactants.

Display rule data. There were two items in the display rule section. The first item queried the likelihood of the participant's emotional expressiveness on a seven-point scale (i.e., in the situation you described, how likely are you to show your emotion, as you feel it, to the other person?). Scores for this item ranged from one to seven.

In the second item, respondents were presented with a list of seven display options: show more sadness than you feel, express your sadness just as you feel it, show less sadness than you actually feel, show your sadness but with another expression, hide your feelings of sadness by showing nothing, hide your feelings of sadness by showing something else, and other (open-ended response option).

Confidentiality, Data Storage, and Transportation

Online data were accessible only by the principal investigator. Paper and pencil questionnaires were entered into an electronic data file in Pakistan and the hard copies were hand carried by the researcher back to the U.S. from Pakistan. All hard data were stored at DePaul University. Paper and pencil measures were stored in a locked closet to which only the principal investigator had access. Online data was downloaded and an electronic back-up was produced and stored in the same location as the hard copies.

CHAPTER III
RESULTS

This section describes the data analyses and results for this project. Analysis strategy and results are presented by Hypothesis and Associated Research Questions.

Hypotheses I, Ia, Ib, and Research Question One

Hypothesis Ia and Hypothesis Ib predicted that Pakistanis would score higher on collectivism with friends, close friends, and colleagues as interactants, as measured by the Individualism-Collectivism in Interpersonal Assessment Inventory (ICIAI) than would U.S. respondents. The associated research question asked about within and between country differences across gender. For each ICIAI outcome, these hypotheses were tested with a 2 x 2 (Country [Pakistan, U.S.] x Gender [male, female]) analysis of variance (ANOVA). This analysis allowed for the examination of main effects of both country and gender and an interaction effect between those two categories. Significant interactions were followed up via Tukey tests in which each of the four Country x Gender groups was compared to the other three Country x Gender groups. Main effects, interactions, and post hoc results with a p value $< .05$ were considered significant. Data were inspected for outliers (e.g., responses more than 3.0 times the interquartile range) and those identified as such were excluded from these analyses. For organizational purposes, analyses below are presented by ICIAI domain (i.e., values, behaviors) for each social group (i.e., family, close friends, colleagues, and strangers).

Hypothesis 1a Values Domain

Values towards family. A significant main effect of country was found, F(1,1,84) 11.02, p = .001, indicating that Pakistani participants reported more collectivist values towards family members than U.S. participants (M = 4.68, SD = .70 vs. M = 4.32, SD = .79). Both the main effect for gender and the interaction between Country x Gender were nonsignificant indicating no significant differences in responses based on gender, either within country or between country. Instead, this analysis suggests that there are indeed country level differences in collectivist values towards one's family members, with Pakistani respondents presenting more collectivist tendencies than their U.S. counterparts. (See Table 10 for Means and Table 11 for Summary of ANOVA.)

Table 10.

Country Level Means in General Indices of ICIAI

		Pakistan			United States		
		N	Mean	SD	N	Mean	SD
Values	Family	111	4.68	0.7	77	4.32	0.79
	Friends	111	4.13	0.8	77	4.15	0.75
	Strangers	111	2.28	1.04	77	2.59	0.93
	Colleagues	110	3.32	0.93	77	3.56	0.78
Behaviors	Family	104	4.58	1.01	75	4.26	0.81
	Friends	103	4.05	1.03	75	4.13	0.69
	Strangers	104	2.3	1.19	75	2.6	1.03

Colleagues	102	3.25	1.1	75	3.56	0.82

Table 11.

Values Domain: Summary of Main and Interaction Effects for Country and Gender

Source	SS	df	MS	F	p
Outcome: Value Domain with Family					
Country	5.93	1	5.93	11.02	0.00
Gender	0.13	1	0.13	0.25	0.62
Country x Gender	1.33	1	1.33	2.47	0.12
Error (within)	99.08	184	0.54		
Total	106.47	187			
Outcome: Value Domain with Close Friends					
Country	0.05	1	0.05	0.08	0.77
Gender	0.02	1	0.02	0.03	0.85
Country x Gender	2.75	1	2.75	4.59	0.03
Error (within)	110.65	185	0.60		
Total	113.47	188			
Outcome: Value Domain with Strangers					
Country	5.86	1	5.86	6.01	0.02
Gender	2.54	1	2.54	2.61	0.11
Country x Gender	10.98	1	10.98	11.28	0.00
Error (within)	182.11	187	0.97		
Total	201.49	190			
Outcome: Value Domain with Colleagues					
Country	3.92	1	3.92	4.82	0.03
Gender	3.26	1	3.26	4.01	0.05
Country x Gender	3.32	1	3.32	4.08	0.04

Error (within)	150.48	185	0.81
Total	160.98	188	

Table 12.

Means by Gender and Country for Interactant on ICIAI Values

	Pakistan						United States					
	Male			Female			Male			Female		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Family	50	4.71	0.72	61	4.65	0.69	14	4.03	0.94	63	4.38	0.74
Friends	50	4.22	0.71	61	4.06	0.87	14	3.83	0.7	63	4.22	0.74
Strangers	50	2.57	0.96	61	2.05	1.05	14	2.12	1	63	2.7	0.89
Colleagues	50	3.53	0.9	60	3.14	0.92	14	3.42	0.82	63	3.59	0.78

Values towards close friends. A significant interaction for Country x Gender, $F(1,185)$ 4.59, $p = .03$, was found, suggesting an interplay of the respondent's gender and country of residence. However, post hoc analysis using Tukey tests did not yield a significant pairwise comparison at the $p < .05$ level.

This finding supports the null hypothesis that consideration of close friends as interactants did not vary across culture and/or gender. This null finding is further demonstrated by examining the means tables (Table 7 for Country Level Means and Table 12 for Country x Gender Means) in which the means are near similar.

Values towards strangers. A significant interaction effect for Country x Gender was found, F(1,187) 11.28, p = .001, indicating the respondent's country of residence and gender had an impact on how they value strangers. Post hoc analysis using Tukey tests indicated significant, p < .05, within country and across country differences. Specifically, Pakistani female respondents (M = 2.05, SD= 1.05) were significantly less collectivistic in their responses as compared to U.S. female respondents (M =2.70, SD = .89) and Pakistani male respondents (M =2.57, SD .96). This finding is contrary to the hypotheses that suggested Pakistanis at large would exhibit less collectivistic values towards strangers and further indicates within and between gender and country differences.

Values with colleagues. A significant interaction effect for Country x Gender was found, F(1,185) 4.08, p = .04, indicating the respondent's country of residence and gender had an impact on how they value colleagues. Post hoc analysis using Tukey tests indicate significant, p < .05, within country and across country differences. Specifically, Pakistani female respondents (M = 3.14; SD=0.92) were significantly less collectivistic toward colleagues than their Pakistani male (M = 3.53; SD 0.90) and U.S. female (M = 3.59; SD = .78) counterparts. This finding suggests an interplay of the respondent's gender and country of residence when responding to values regarding colleagues. These results support the notion that Pakistanis report more collectivistic values with respect to family members than Americans do. However, contrary to the hypothesis, this finding did not extend to close friends.

In regards to strangers and colleagues, the findings are nuanced. Findings were contrary to the hypothesis that Pakistanis at large would exhibit less collectivistic values towards strangers. The data further indicated within country differences for Pakistani respondents across gender. That is, Pakistani females were less collectivist with strangers than both American females and Pakistani males. However, Pakistani males were not significantly different from any other comparison group in their level of reported collectivism.

In contrast to the hypothesis that Pakistanis would show more collectivism than Americans regarding colleagues, U.S. females reported more collectivist values than did Pakistani females. Pakistani males did not report significantly more collectivism with respect to colleagues than did any other group.

Hypothesis 1a Behavior Domain

***Behavior towards family*.** A significant main effect for country was found, F(1,175) 3.86, p = .05 (See Table 10), with Pakistanis scoring higher on collectivism than Americans. The ICIAI average for Pakistani respondents (M= 4.58, SD = 1.01) in comparison to the U.S. respondents (M = 4.26, SD = .81) aligns with the findings in the values section. Taken together and looking across reported values and behaviors towards family, the hypothesis that Pakistanis would be more collectivistic toward this in-group is supported.

Table 13.

Behaviors Domain: Summary of Main and Interaction Effects for Country and Gender

Source	SS	Df	MS	F	P
Outcome: Behavior Domain with Family					
Country	3.58	1	3.58	3.86	0.05
Gender	0.21	1	0.21	0.22	0.64
Country x Gender	1.73	1	1.73	1.86	0.17
Error (within)	162.28	175	0.93		
Total	167.79	178			
Outcome: Behavior Domain with Close Friends					
Country	0.95	1	0.95	1.03	0.31
Gender	0.01	1	0.01	0.01	0.91
Country x Gender	2.76	1	2.76	3.00	0.08
Error (within)	160.62	175	0.92		
Total	164.33	178			
Outcome: Behavior Domain with Stranger					
Country	6.32	1	6.32	5.07	0.03
Gender	4.15	1	4.15	3.33	0.07
Country x Gender	9.05	1	9.05	7.26	0.01
Error (within)	219.58	176	1.25		
Total	239.11	179			

Outcome: Behavior Domain with Colleagues					
Country	6.70	1	6.70	6.05	0.01
Gender	4.21	1	4.21	3.80	0.05
Country x Gender	2.11	1	2.11	1.91	0.17
Error (within)	192.55	174	1.11		
Total	205.56	177			

Table 14.

Means by Gender and Country for Interactant on ICIAI Behaviors

	Pakistan						United States					
	Male			Female			Male			Female		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Family	46	4.59	1.04	58	4.58	0.99	14	3.94	0.91	61	4.34	0.78
Friends	46	4.09	1.14	57	4.01	0.94	14	3.82	0.66	61	4.2	0.69
Strangers	46	2.61	1.08	58	2.05	1.23	14	2.14	1.01	61	2.7	1.02
Colleagues	46	3.44	1.11	56	3.09	1.07	14	3.5	0.88	61	3.57	0.82

Behaviors towards close friends. The 2 x 2 ANOVA testing Country x Gender indicated no significant main effects or interaction. This finding is consistent with the results from the values domain. Based on these findings, the hypothesis that Pakistani respondents would score higher on their collectivistic values and behaviors towards close friends is not supported.

Behaviors towards strangers. A significant interaction effect for Country x Gender was found, F(1,176) 7.26, p = .01, indicating the respondent's country of residence and gender had an impact on how they value strangers. Post hoc analysis using Tukey tests indicate significant, p < .05, within country and across country differences. Specifically, Pakistani female respondents (M =2.05, SD = 1.23) were significantly less collectivistic in their responses than U.S. female respondents (M = 2.70, SD = 1.02).

Additionally, Pakistani females (M =2.05, SD = 1.23) were also significantly less collectivistic in their values towards strangers than their Pakistani male counterparts (M = 2.61, SD = 1.08) (see Table 14 for Country x Gender Means). This finding is contrary to the hypothesis that suggested Pakistanis at large would exhibit less collectivistic values towards strangers and further indicates a within country difference in Pakistani respondents by gender.

Behaviors with colleagues. A 2 x 2 ANOVA testing country and gender did not indicate a significant interaction effect. A significant main effect for country, F(1,174) 6.05 p = .01, and gender was found, F (1,174) 3.80, p = .05. These findings are contrary to the hypothesis that suggested that Pakistani respondents (M = 3.25, SD = 1.10) would be more collectivistic than U.S. respondents (M = 3.56, .82) and in fact, suggest the opposite. Findings also suggest differences across male (M = 3.46, SD = 1.1) and female (M = 3.3, S.D = 1.0) respondents with males rating higher on the collectivism scale.

Taken together these results support the notion that Pakistanis report more collectivistic behaviors toward family members than do Americans. However, contrary to the hypothesis, this finding does not extend to close friends.

In regards to strangers and colleagues, the findings are nuanced. With strangers, findings are contrary to the hypothesis that Pakistanis at large would exhibit less collectivistic values towards strangers and data analysis further indicate a within country difference in Pakistani respondents by gender. That is, Pakistani females were less collectivist with strangers than both American females and Pakistani males. However, Pakistani males were not less collectivistic with strangers than were Americans of either gender.

With respect to colleagues, in contrast to the hypothesis that Pakistanis would show more collectivism than Americans, U.S participants reported more collectivism than did Pakistani participants. Also, across both countries, males scored higher on collectivistic behaviors than did female respondents.

Hypothesis Ib ICIAI Subscale Analysis

Hypothesis Ib predicted that Pakistanis would score higher on collectivism for all four subscales of the ICIAI (i.e., social identification, self-control, social harmony, and social sharing recognition) when interacting with family, friends, and colleagues but not strangers. Research question one asked if these findings would vary across gender of the respondent.

This hypothesis was tested with a 2 x 2 (Country [Pakistani, U.S.] x Gender [male, female]) multivariate analysis of variance (MANOVA) with post

hoc analysis using Tukey tests. MANOVA allows for the comparison of two or more groups across multiple correlated or related dependent variables.

In this particular instance, the dependent variables are subscale scores, by domain (i.e., values and behaviors) of a constructed measure, the ICIAI (i.e., social identification [social identification_values_family, social identification_values_friends, social identification_values colleagues, social identification_values_stranger, social identification_behvaiors_family, social identification_behaviors_friends, social identification_behaviors colleagues, social identification_behaviors_stranger], self-control [self-control _values_family, self-control_values_friends, self-control _values colleagues, self-control _values_stranger, self-control_behvaiors_family, self-control_behaviors_friends, self-control_behaviors colleagues, self-control _behaviors_stranger], social harmony [social harmony_values_family, social harmony_values_friends, social harmony_values colleagues, social harmony_values_stranger, social harmony_behvaiors_family, social harmony_behaviors_friends, social harmony_behaviors colleagues, social harmony_behaviors_stranger], and social sharing recognition [social sharing of recognition_values_family, social sharing of recognition_values_friends, social sharing of recognition_values colleagues, social sharing of recognition_values_stranger, social sharing of recognition_behvaiors_family, social sharing of recognition_behaviors_friends, social sharing of recognition_behaviors colleagues, social sharing of recognition_behaviors_stranger]). Therefore, the use of MANOVA here

mitigates the probability of an increased type I error that conducting separate ANOVAs for each subscale score would produce. Thus, the danger of a false positive pertaining to the null hypothesis is abated.

This test yielded a significant Wilks's lambda at the $p < .05$ level for country level differences, Wilks's lambda $f (32, 134) = 2.71$, $p < .001$. However, the main effect for gender (Wilks's lambda $f (32, 134) = 1.36$, $p > .05$.) and the interaction effects (Wilks's lambda $f (32, 134) = .76$, $p > .05$) were nonsignificant, indicating that respondents' scores on these subscales did not significantly vary by gender and instead varied by country of residence. This finding in part supports the hypothesis that Pakistanis would score higher on collectivism for all four subscales of the ICIAI (social identification, self-control, social harmony, and social sharing recognition) when interacting with family, friends, and colleagues but not strangers. (See Table 15 for Means by Country. Subscales with significant Tukey's are noted with an asterisk.) Post hoc results are unpacked below by interactant.

When considering family, Pakistani respondents scored significantly higher on social identification and social sharing of recognition on the values domain on ICIAI (see Table 15 for Means). As predicted, Pakistani respondents also scored higher on these same subscales for the behaviors domain. However, they did not significantly differ from their U.S. counterparts in social harmony and self-control across either domain.

When considering friends, Pakistani respondents scored higher from their U.S. counterparts for social identification in regards to values and behaviors.

However, Pakistani respondents differed only in the behaviors domain for social sharing of recognition.

When considering strangers, U.S respondents exhibited significantly more self-control than their Pakistani counterparts in regards to values and behaviors. Finally, when considering colleagues, U.S. respondents scored higher on self-control for values and behaviors and higher on social harmony for their behavior scores than their Pakistani counterparts, which does not support the hypothesis.

Table 15.

ICIAI Subscales: Means by Country

			Pakistan			United States		
	Domain	Social group	*n*	*M*	*SD*	*n*	*M*	*SD*
Social identification*	Values	Family	111	4.4	1.4	78	3.3	1.4
Self-control	Values	Family	113	4.6	1.4	78	4.5	1.5
Social harmony	Values	Family	113	4.8	0.8	78	4.8	0.6
Social sharing of recognition*	Values	Family	112	4.6	1	78	4.2	1.3
Social identification*	Behaviors	Family	101	4.6	1.4	76	3.5	1.3
Self-control	Behaviors	Family	106	4.7	1.4	76	4.6	1.4

Social harmony	Behaviors	Family	106	4.6	1	76	4.6	0.7
Social sharing of recognition*	Behaviors	Family	107	4.5	1.2	76	4.1	1.4
Social identification*	Values	Friends	112	3.6	1.3	78	3.3	1.3
Self-control	Values	Friends	111	4.2	1.3	78	4.4	1.4
Social harmony	Values	Friends	113	4.4	0.9	78	4.7	0.6

(continued)

			Pakistan			United States		
	Domain	Social group	n	M	SD	n	M	SD
Social sharing of recognition	Values	Friends	112	3.8	1.3	78	3.7	1.3
Social identification*	Behaviors	Friends	101	3.8	1.3	76	3.4	1.2
Self-control	Behaviors	Friends	104	4.3	1.4	76	4.6	1.2
Social harmony	Behaviors	Friends	105	4.2	1	76	4.6	0.6
Social sharing of recognition*	Behaviors	Friends	106	3.8	1.4	76	3.6	1.3
Social identification	Values	Colleagues	110	2.7	1.3	78	2.7	1.3
Self-control*	Values	Colleagues	108	4.1	1.4	78	5.1	1.1
Social harmony	Values	Colleagues	110	3.8	0.9	78	4.1	0.7
Social sharing of recognition	Values	Colleagues	109	2.6	1.4	78	2.5	1.3
Social identification	Behaviors	Colleagues	100	2.7	1.4	76	2.8	1.3

(continued)

			Pakistan			United States		
	Domain	Social group	*n*	*M*	*SD*	*n*	*M*	*SD*
Self-control*	Behaviors	Colleagues	100	4	1.4	76	5	1
Social harmony*	Behaviors	Colleagues	102	3.7	1.1	76	4.1	0.8
Social sharing of recognition	Behaviors	Colleagues	103	2.6	1.5	76	2.4	1.4
Social identification	Values	Strangers	112	1.5	1.3	78	1.7	1.3
Self-control*	Values	Strangers	110	3.3	1.9	78	4.3	1.5
Social harmony	Values	Strangers	112	2.8	1.2	78	3.2	1
Social sharing of recognition	Values	Strangers	110	1.3	1.4	78	1.3	1.3
Social identification	Behaviors	Strangers	98	1.8	1.5	76	1.7	1.4
Self-control*	Behaviors	Strangers	103	3.2	1.8	76	4	1.6
Social harmony	Behaviors	Strangers	104	2.8	1.3	76	3.3	1.2
Social sharing of recognition	Behaviors	Strangers	104	1.4	1.5	76	1.3	1.3

Note. $N = 193$. * Subscales with significant Tukey's are noted with an asterisk.

Hypotheses II and III

Hypotheses II and III respectively sought to confirm that respondents from each country would produce stories representative of their cultural perspective. That is, Pakistanis would construct emotion-eliciting events that were more consistent with collectivist values than would U.S. respondents and Americans would construct events more consistent with individualist values. These hypotheses were tested using a set of chi-square analyses, one for each emotion. Each chi-square compared the probability of a respondent's story being categorized as collectivistic or individualistic based on cultural affiliation that is beyond chance.

Analyses indicate that the U.S. respondents produced significantly more collectivistic stories eliciting sadness ($X^2(1, N= 193) = 4.97, p < .05$) than did the Pakistani respondents (U.S. = 95%, Pakistani = 85% respectively). While chi-square statistics for the remaining emotions (see Table 13) were not statistically significant, some interesting trends were noted.

The majority of stories written by both Pakistanis and U.S. respondents eliciting happiness were coded as socially bonding (e.g., feeling love among in-group member, spending time with friends) and thus appeared to be representative of collectivistic values. Closer examination indicates that a slightly greater proportion of U.S. respondents wrote happiness eliciting stories that were categorized as collectivist than did Pakistani respondents. This finding is contrary to the hypothesis that U.S. respondents would write stories that were aligned with their cultural values.

However, analysis of pride and anger stories indicate some tendency (albeit nonsignificant) for respondents to write stories that were in line with their culture's value systems. Also, while the majority of shame stories from both cultures represented collectivist values, U.S. respondents (61%) wrote a higher percentage of stories coded as representing collectivistic values than ones representing their own cultural values.

Table 16 .

Chi-Square Analysis of Story Categorization

	Pakistan				United States					
	COL		IND		COL		IND			
Emotion	*N*	%	*n*	%	*n*	%	*n*	%	X^2	*p*
Sadness	69	85.19	12	14.82	106	94.64	6	5.36	4.97	0.03
Happiness	43	56.58	33	43.42	67	58.77	47	41.23	0.09	0.76
Pride	44	58.67	31	41.33	51	45.95	60	54.05	2.90	0.09
Anger	36	53.73	31	46.27	50	46.30	58	53.70	0.91	0.34
Shame	36	52.94	32	47.06	66	61.11	42	38.89	1.14	0.29

Note. COL = Collectivist. IND = Individualist. Ns represent the total number of codable stories.

Another look. Because findings were weak when all stories for each emotion produced in each culture were examined together, further analyses were conducted to examine subsets of the stories. In the first of these secondary analyses, the analyses as described previously were conducted with the omission of non-White participants from the U.S. group of respondents. Results mirrored those above save for the additional near significant finding for anger, $X^2(1, N=175) = p = .056$ (see Table 17), wherein the majority of Pakistani and U.S. respondents wrote anger stories representing their own cultural value system.

Table 17.

Chi-Square Analysis of Story Categorization: U.S. - White Americans Only

	Pakistan				United States (non-White participants omitted)					
	COL		IND		COL		IND			
Emotion	*n*	%	*n*	%	*N*	%	*N*	%	X^2	*p*
Sadness	69	86.5	11	13.75	66	97.06	2	2.94	5.36	0.02
Happiness	42	56.00	33	44.00	39	58.21	28	41.79	0.07	0.79
Pride	43	58.11	31	41.89	33	48.53	35	51.47	1.31	0.25
Anger	36	53.73	31	46.27	25	37.31	42	62.69	3.64	0.06
Shame	35	52.24	32	47.76	38	57.58	28	42.42	0.38	0.54

Note. COL = Collectivist, IND = Individualist.

Drilling down by story interactant. Subsequently, data analysis included an examination of subsets of the stories defined by the type of relationship between the story characters (including the respondent when appropriate). Because the analyses of the ICIAI showed that Pakistanis reported more collectivistic values and behaviors toward family members than did U.S. respondents, the stories involving family members were examined in a separate set of analyses.

Results were nonsignificant across all five emotions (see Table 18). However, it should be noted that respondents from both cultures wrote stories more in line with collectivistic values with a greater proportion of the Pakistanis writing collectivistic stories.

Table 18.

Chi-Square Analysis of Story Categorization: Stories Involving Family Characters and/or Interactants

	Pakistan				United States					
	COL		IND		COL		IND			
Emotion	*n*	%	*N*	%	*n*	%	*N*	%	X^2	*p*
Sadness	32	100.00	0	0.00	46	97.87	1	2.13	0.69	0.41
Happiness	17	85.00	3	15.00	16	69.57	7	30.43	1.43	0.23
Pride	18	94.74	1	5.26	22	75.86	7	24.14	2.94	0.09
Anger	6	75.00	2	25.00	12	63.16	7	36.84	0.36	0.55
Shame	18	100.00	0	0.00	36	97.30	1	2.70	0.50	0.48

Note. COL = Collectivist, IND = Individualist

Next, because the analyses of the ICIAI show that Pakistanis reported less collectivistic tendencies toward strangers and colleagues than did the U.S respondents, the categorization of the stories that involved a stranger/colleague as an interactant or a character in the story was examined (see Table 19). A significant result was noted for anger only $X^2(1, N=27) = 4.5351$, $p < .05$). For anger, both sets of respondents wrote a higher proportion of stories representing individualistic values, although U.S. respondents wrote a higher proportion of the individualistic stories than did Pakistanis.

Table 19.

Chi-Square Analysis of Story Categorization: Involving Stranger and Colleague Characters and/or Interactants

	Pakistan				United States					
	COL		IND		COL		IND			
Emotion	*n*	%	*n*	%	*n*	%	*n*	%	X^2	*P*
Sadness	4	100.00	0	0.00	8	88.89	1	11.11	0.4815	0.4878
Happiness	0	0.00	3	100.00	4	44.44	5	55.56	2.0000	0.1573
Pride	7	70.00	3	30.00	14	63.64	8	36.36	0.1234	0.7254
Anger	5	35.71	9	64.29	4	10.53	34	89.47	4.5351	0.0332
Shame	4	28.57	10	71.43	9	42.86	12	57.14	0.7343	0.3915

Note. COL = Collectivist, IND = Individualist

Although the analyses of the ICIAI scores show no significant differences between Pakistanis and U.S. respondents in their values and behaviors involving friends, those emotion stories involving friends and intimate others characters and interactants were examined separately as well. Results were nonsignificant across all five emotions as depicted in Table 20.

Table 20.

Chi-Square Analysis of Story Categorization: Stories Involving Friends and Intimate Other as Characters and/or Interactants

	Pakistan				United States					
	COL		IND		COL		IND			
Emotion	*n*	%	*n*	%	*n*	%	*n*	%	χ^2	*P*
Sadness	18	94.74	1	5.26	50	96.15	2	3.85	0.0690	0.7927
Happiness	16	100.00	0	0.00	37	88.10	5	11.90	2.0845	0.1488
Pride	4	100.00	0	0.00	6	75.00	2	25.00	1.2000	0.2733
Anger	15	93.75	1	6.25	27	79.41	7	20.59	1.6643	0.1970
Shame	2	100.00	0	0.00	18	90.00	2	10.00	0.2200	0.6390

Note. COL = Collectivist, IND = Individualist.

Hypothesis IV

Hypothesis IV proposed that emotional expressivity would vary by the social context of the situation depicted in each story. That is, Pakistanis respondents would be as emotionally expressive as their U.S. counterparts in social bonding contexts (i.e., stories that describe social bonding in which the expression of an emotion would be considered to enhance the relationship between interacting partners). Conversely, in contexts within which the expression of the felt emotion would foster discord, the hypothesis proposed that U.S. participants would be more expressive with all emotions.

Originally, it was proposed that these hypotheses would be tested in a 2 (Country [Pakistan, U.S.]) x 2 (Social Context [socially bonding, socially

disruptive]) x 5 (Emotions [Sad, Anger, Happy, Pride, Shame]) analysis of variance (ANOVA) model. However, the quality of the data (e.g., lack of descriptive details in the story that would allow for coding of social context) did not allow for the analysis of social context as proposed. Specifically, social context by story categorization did not yield high enough cell sizes to complete comparative analysis.

Instead, a 2 (Country [Pakistan, U.S.]) x 5 (Emotions [Sad, Anger, Happy, Pride, Shame]) ANOVA was conducted with expression of felt emotion as the dependent variable. This analysis allows for the examination of main effects for both country and emotion and interactions between the two categories.

Table 21.

Expression of Emotion as Felt: Means and Standard Deviations by Country and Emotion

	United States			Pakistan		
	M	SD	N	M	SD	N
Anger	4.80	1.82	70	4.47	1.54	59
Happiness	6.17	1.19	70	4.85	1.36	61
Pride	5.49	1.48	70	4.80	1.46	54
Sadness	5.19	1.78	70	4.13	1.94	60
Shame	4.33	1.64	70	3.94	1.90	53
Total	5.19	1.71	350	4.45	1.68	287

A significant main effect for country ($F(1,627)$ 33.52, $p < .0001$) and emotion ($F(4, 627)$ 14.12, $p < .0001$) was found. This main effect indicates country level differences in the average likelihood to express emotions as felt

significant and differences in the average amount of expression of the felt emotion across emotions (See Table 18 for Means by County for each Emotion). Also, a near-significant interaction ($p < .07$) between county and emotion also was found. (See Table 21 for means and Table 22 for Summary of ANOVA.)

Table 22.

Expression of Emotion as Felt: Main and Interaction Effects for Country and Emotion

Source	*SS*	*df*	*MS*	*F*	*p*
Country	88.30	1	88.299	33.52	<.0001
Emotion	148.76	4	37.189	14.12	<.0001
Country x Emotion	23.38	4	5.845	2.22	0.0655
Error (within)	1651.56	627	2.634		
Total	1912.00	636			

Examination of means and signifcant post hoc tests reveal that U.S. respondents (M = 5.19 , SD = 1.71) were significantly more likely to express emotion as felt than Pakistani respondents (M = 4.45 , SD = 1.68). When examining the main effects for emotions, it was found that happiness (M = 5.56, SD = 1.43) was significantly more likley to be expressed as felt than than anger (M = 4.65, SD = 1.70), sadness (M = 4.70, SD = 1.92) and shame (M = 4.16, SD = 1.76). Additionally, there was a signifcant difference in the expression of pride (M = 5.19, SD = 1.51) and shame (M = 4.16, SD = 1.76) with respondents more likely to express feelings of pride.

Although the Country x Emotion interaction was found to be near-significant ($p <$ .07), the data were inspected to explore differences between participants from the two countries in their response to each of the individual emotions (see Table 21). Inspection of the means indicated that the greatest differences between countries occurred for happiness, sadness, and pride with U.S. participants scoring higher than Pakistani participants. However, to a lesser extent, U.S. participants also scored higher for the other emotions (i.e., anger and shame) as well.

Although the proposed question had to be altered, results indicate that U.S. participants were more likely to express their felt emotions than their Pakistani counterparts and that the likelihood to express felt emotion varied by the emotion.

Research Question Two. Research question two asked if display rules vary across relationship hierarchies and gender. This research question investigated cultural differences in the frequency of display options that were selected for use.

Recall that as a follow-up to the question of one's likelihood to express the elicited emotion as felt of likelihood was an inquiry into the manner of expression. A set of 2 (Country [Pakistan, U.S.]) x 7 (Display Options [show more sadness than you feel, express your sadness just as you feel it, show less sadness than you actually feel, show your sadness but with another expression, hide your feelings of sadness by showing nothing, hide your feelings of sadness by showing something else, and other]) chi-square test was used to examine these data. These chi-square tests, one per emotion, allowed for the determination of

whether the seven response options were equally utilized by U.S and Pakistani participants.

Post hoc analyses were conducted to follow up on those chi-square tests that yielded a significant test result. These post hoc analyses followed the method described by Beasley and Schumacker (1995). That is, adjusted standardized residuals for each cell were examined, and those that exceeded the + or - 1.96 threshold for significance were identified for significance testing based on an adjusted *p* value that corrects for Type I error. This adjusted significance criterion was established by dividing .05 by the number of cells in the contingency table; this yielded a new value of .0036 for all emotions save happiness.

For happiness, response options six and seven were not used by participants, resulting in a 2 x 5 contingency table and an adjusted *p* value of .005 (.05/10 = .005). Using SPSS, the *p* value for each cell was determined, and those cells with p-values exceeding the adjusted *p* value were identified, and their values interpreted. Also, results for those cells with *p* values that were less than .05 but did not meet the stricter adjusted *p* value criterion were still inspected, and their nonsignificant tendencies were noted. Results are presented below by emotion in Tables 20-24.

Anger. A chi-square analysis was performed to analyze anger responses. The analysis yielded a significant overall value, $X^2(6) = 16.884$, p = .010. To determine the source of overall chi-square significance, the adjusted residual values were examined and analyzed as described above. Once adjusted *p* values were calculated, post hoc analysis yielded a nonsignificant tendency in the

selection of display options (See Table 23). That is, U.S. participants espoused the second response option (express your anger just as you feel it) less than expected (Observed = 16; Expected = 22.99) whereas Pakistani respondents had a greater than expected frequency (Observed = 28; Expected = 21.01) to select this same display option.

Conversely, U.S. participants espoused the third (show less anger but with another emotion) and fifth (hide your feeling of anger by showing nothing) more than expected. Their Pakistani counterparts had a less than expected frequency to select these same response options.

Table 23.

Post Hoc Chi-Square Tests of Display Options: Anger

	United States						Pakistan					
	Frequency	Expected	%	Adjusted Residual	X^2	p	Frequency	Expected	%	Adjusted Residual	X^2	p
Show more anger than you feel	7	10.4	10%	-1.67	2.79	0.09492	13	9.55	20%	1.67	2.79	0.094919
Express your anger just as you feel it	16	22.99	23%	-2.57	6.60	0.01017*	28	21.01	44%	2.57	6.60	0.01017*
Show less anger than you actually feel	26	19.33	37%	2.58	6.66	0.00988*	11	17.67	17%	-2.58	6.66	0.00988*
Show your anger but with another expression	5	5.22	7%	-0.15	0.02	0.88077	5	4.78	8%	0.15	0.02	0.880765
Hide your feelings of anger by showing nothing	13	8.88	19%	2.14	4.58	0.032355*	4	8.12	6%	-2.14	4.58	0.032355*
Hide your feelings of anger by showing something else	3	2.61	4%	0.35	0.12	0.726339	2	2.39	3%	-0.35	0.12	0.726339
Other (with optional open- ended response)	0	0.52	0%	-1.05	1.10	0.726339	1	0.48	2%	1.05	1.10	0.293718

Values with an * are significant at the $p < .05$ level, however, did not meet the adjusted *p* value of .0036.

***Sadness*.** The chi-square analysis for the sadness responses yielded a significant overall value, $X^2(6) = 21.19$, $p = .002$. To determine the source of overall significance, the adjusted residual values were examined and analyzed as described above. Post hoc analyses yield a nonsignificant tendency for U.S. respondents to espouse the first response option (show more sadness than you feel) less than expected (Observed = 0; Expected = 2.63) whereas their Pakistani counterparts selected this display option more than expected (Observed = 5; Expected = 2.37).

Conversely, although also not significant, U.S. respondents selected the third response option (show less sadness than you actually feel) more than expected (Observed = 28; Expected = 20.53). Pakistani respondents selected this response option less than expected (Observed = 11; Expected = 18.47). (See Table 24 for complete post hoc analyses results.)

Table 24.

Post Hoc Chi-Square Tests of Display Options: Sadness

	United States						Pakistan					
	Frequency	Expected	%	Adjusted Residual	X^2	p	Frequency	Expected	%	Adjusted Residual	X^2	p
Show more sadness than you feel	0	2.63	0%	-2.40	5.76	0.016395*	5	2.37	8%	2.40	5.76	0.016395*
Express your sadness just as you feel it	30	26.32	43%	1.32	1.74	0.186835	20	23.68	32%	-1.32	1.74	0.186835
Show less sadness than you actually feel	28	20.53	40%	2.85	8.12	0.004372*	11	18.47	17%	-2.85	8.12	0.004372*
Show your sadness but with another expression	4	6.84	6%	-1.66	2.76	0.096914	9	6.16	14%	1.66	2.76	0.004372
Hide your feelings of sadness by showing nothing	5	7.89	7%	-1.59	2.53	0.111835	10	7.11	16%	1.59	2.53	0.096914
Hide your feelings of sadness by showing something else	3	4.21	4%	-0.88	0.77	0.378859	5	3.79	8%	0.88	0.77	0.111835
Other (with optional open-ended response)	0	1.58	0%	-1.85	3.42	0.064314	3	1.42	5%	1.85	3.42	0.378859

Note. Values with an * are significant at the $p < .05$ level, however, did not meet the adjusted *p* value of .0036.

***Happiness*.** The chi-square analysis for the happiness responses yielded a significant overall value, $X^2(4) = 10.062$, p = .039. To determine the source of overall significance, the adjusted residual values were examined and analyzed as described by Beasley and Schumacker (1995). Post hoc analyses yielded a nonsignificant tendency for U.S. respondents to espouse the first response option (show more happiness than you feel) less than expected (Observed = 8; Expected =14.32) whereas their Pakistani counterparts selected this display option more than expected (Observed = 19; Expected = 12.68).

Conversely, although also not significant, U.S. respondents selected the second response option (express your happiness just as you feel it) more than expected (Observed = 52; Expected = 44.55). Similarly, Pakistani respondents also selected this response option less than expected (Observed = 32; Expected = 39.45). (See Table 25 for complete post hoc analyses results.)

Table 25.

Chi-Square Analysis with Post Hoc: Happiness

	U.S.						Pakistan					
	Frequency	Expected	%	Adjusted Residual	X^2	p	Frequency	Expected	%	Adjusted Residual	X^2	p
Show more happiness than you feel	8	14.32	11%	-2.73	7.45	0.006333*	19	12.68	31%	2.73	7.45	0.006333*
Express your happiness just as you feel it	52	44.55	74%	2.70	7.29	0.006934*	32	39.45	52%	-2.70	7.29	0.006934*
Show less happiness than you actually feel	7	7.95	10%	-0.52	0.27	0.603064	8	7.05	13%	0.52	0.27	0.603064
Show your happiness but with another expression	2	2.65	3%	-0.60	0.36	0.548506	3	2.35	5%	0.60	0.36	0.548506
Hide your feelings of happiness by showing nothing	1	0.53	1%	0.94	0.88	0.347218	0	0.47	0%	-0.94	0.88	0.347218

Note. Values with an * are significant at the $p < .05$ level, however, did not meet the adjusted *p* value of .005.

Pride. The chi-square analysis for the pride responses yielded a nonsignificant overall value, $X^2(6) = 8.087$, $p = .232$, indicating that the utilization of display options did not significantly vary than expected for respondents from each country. Table 26 presents the expected and observed frequency of each display option.

Table 26.

Expected and Observed Frequency of Display Options: Pride

	United States			Pakistan		
	Frequency	Expected	%	Frequency	Expected	%
Show more pride than you feel	5	6.5	7.1%	7	5.49	12%
Express your pride just as you feel it	35	36.9	50.0%	33	31.10	56%
Show less pride than you actually feel	24	18.4	34.3%	10	15.55	17%
Show your pride but with another expression	2	3.3	2.9%	4	2.74	7%
Hide your feelings of pride by showing nothing	4	3.8	5.7%	3	3.20	5%
Hide your feelings of pride by showing something else	0	0.5	0.0%	1	0.46	2%
Other (with optional open-ended response)	0	0.5	0.0%	1	0.46	2%

Shame. The chi-square analysis for the shame responses yielded a nonsignificant overall value, $X^2(6) = 10.748$, $p = .096$. These data indicate that the utilization of display options did not significantly vary than expected for respondents from each country. Table 27 presents the expected and observed frequency of each display option.

Table 27.

Expected and Observed Frequency of Display Options: Shame

	United States			Pakistan		
	Frequency	Expected	%	Frequency	Expected	%
Show more shame than you feel	6	6.11	9%	5	4.89	0.09
Express your shame just as you feel it	15	21.67	21%	24	17.33	0.43
Show less shame than you actually feel	21	17.78	30%	11	14.22	0.20
Show your shame but with another expression	7	5.56	10%	3	4.44	0.05
Hide your feelings of shame by showing nothing	17	13.33	24%	7	10.67	0.13
Hide your feelings of shame by showing something else	4	5.00	6%	5	4.00	0.09
Other (with optional open- ended response)	0	0.56	0%	1	0.44	0.02

Hypothesis V: The Religiosity Scale

Recall that the term *religiosity* is defined as the quality of being religious, the strength and influence of religion in the participant's life, as well as the degree of participation in religious practices and events. Hypothesis V proposed that the religiosity survey would be validated and found to be reliable for each participant

group. To this end, a religiosity survey (see Appendix C) was developed to investigate religiosity. The first item in the survey was an open-ended option to establish the religious affiliation of the respondent. The remaining items, two through seven, were presented using a seven-point Likert scale format (zero = not at all important, seven = very important). Item two (REL) assessed the degree to which the respondents considered themselves to be religious. Collectively, items three to six assessed the importance of and the reference to religious beliefs in daily life. Finally, the last two items, items seven and eight, queried the amount of time spent on religious practices and events and were presented with a zero through five scale (zero indicated no time and five indicated six or more hours per week). The religiosity scale was constructed based on similar scales developed by other researchers (Hill and Hood, 1999).

Validity. Criterion validity used to examine the validity of the constructed scale (i.e., determine the extent to which the scale being tested correlates with a set criterion). In this instance, a higher religiosity score, as measured by items three through seven, was hypothesized to correlate highly with the criterion item (item two). The correlation between the two scores is the criterion-related validity coefficient and should be positive. Strong validity is indicated by values close to 1.00, and a weak validity is indicated by values closer to 0.00. An overall moderate correlation of $r = .727$, $p < .05$ was found. However, country level correlations of these items indicate that this relationship varies across cultures (see Table 28 and 29 respectively). Here, analyses reveal a stronger correlation between test items and the criterion item for U.S. respondents ($r = .79$, $p < .001$)

than their Pakistan counterparts ($r = .30$, $p < .001$). Additional examination of the item level correlations also reveals a differential relationship between individual items with lower correlations noted across all items for Pakistani respondents. Additional examination of the item level correlations also reveals a differential relationship between individual items with lower correlations noted across all items for Pakistani respondents.

Table 28.

Pearson Correlation Matrix Among REL and Religiosity Scale Items: U.S. Respondents

	REL (sum of items 3 - 7)	Importance in day-to-day life	Importance in way you interact with others	Seeking of spiritual comfort	Guiding force in life	Important on how you conduct yourself with others	Hours of week dedicated to religious or spiritual rituals or practices	Hours of weeks dedicated to attending religious or spiritual events
Self-report religiosity	0.79237*	0.75352*	0.74274*	0.75768*	0.75483*	0.7103*	0.73117*	0.50097*
REL (sum of items 3 - 7)		0.94439*	0.94838*	0.92124*	0.95428*	0.93237*	0.77469*	0.49524*
Importance in day-to-day life			0.88591*	0.83458*	0.88532*	0.8353*	0.71564*	0.47818*
Importance in way you interact with others				0.81453*	0.86038*	0.90416*	0.71232*	0.48351*
Seeking of spiritual comfort					0.88327*	0.79138*	0.75617*	0.46772*
Guiding force in life						0.85581*	0.74128*	0.45191*
Important on how you conduct yourself with others							0.71043*	0.44419*
Hours of week dedicated to religious or spiritual rituals or practices								0.57668*

Table 29.

Pearson Correlation Matrix Among REL and Religiosity Scale Items: Pakistani Respondents

	REL (sum of items 3 - 7)	Importance in day-to-day life	Importance in way you interact with others	Seeking of spiritual comfort	Guiding force in life	Important on how you conduct yourself with others	Hours of week dedicated to religious or spiritual rituals or practices	Hours of weeks dedicated to attending religious or spiritual events
Self-report religiosity	0.300**	0.317**	0.219***	0.077	0.3681*	0.184	0.286**	0.436*
REL (sum of items 3 - 7)		0.798*	0.748*	0.703*	0.705*	0.782*	0.411*	0.322
Importance in day-to-day life			0.588*	0.511*	0.606*	0.547*	0.482*	0.290**
Importance in way you interact with others				0.373	0.299**	0.562*	0.424*	0.328**
Seeking of spiritual comfort					0.451*	0.389*	0.266**	0.198***
Guiding force in life						0.579*	0.237***	0.164
Important on how you conduct yourself with others							0.325**	0.229***
Hours of week dedicated to religious or spiritual rituals or practices								0.232***

Note. * p < .0001, ** p < .01, ***p < .05

Reliability. Due to response scale variations, the internal consistency reliability of the religiosity scale was evaluated using Cronbach's alpha coefficients for test items three through seven and items eight and nine separately. Items three through seven, which assessed the importance of and the reference to religious beliefs in daily life, yielded an acceptable scale reliability, Cronbach's alpha = .95. Similar results were also found for items eight and nine, which assessed the amount of time spent on religious practices and events, Cronbach's alpha = .70.

Taken together, internal consistency was found to be acceptable as was the moderate finding for validity for the developed scale. As such, the hypotheses received moderate support, but further refinements of the measurement of religiosity are needed.

CHAPTER IV.

DISCUSSION

This dissertation study investigated cultural differences in the construction of emotion-eliciting events and the associated display rules for exhibiting emotional responses to others. These differences were examined within the context of the well documented cultural classification system known as Individualism/Collectivism (I/C) (Triandis, 1994, 1995; Triandis et al., 1988). In this comparative study, individualists were represented by a sample of participants from the United States (U.S.) whereas collectivists were represented by a Pakistani participant sample.

Recall, as mentioned in Chapter I, that much of the early emphasis in emotion research has centered on the determination of the universality of emotional expressions and the functions of emotions (Darwin, 1872/1998; Niedenthal, Krauth-Gruber, & Ric, 2006). Broad agreement exists that emotions are one of several primary motivational forces in humans and that much of our behavior is organized in the service of emotion-related functions and goals. Many theorists believe that there is a basic set of universal emotions linked to discrete facial expressions, all of which are tied to the subjective experience of the individual (Ekman, 1980; Ekman, 1999b; Izard, 1971). While the unique tie between emotions and specific facial expressions is currently controversial (Camras, Fatani, Fraumeni & Shuster, 2016), there is general agreement that emotion communication occurs through a variety of modalities including facial expressions, body movements, and vocal intonation. Nonetheless, facial

expressions, as well as other emotion signals, can be altered, masked, minimized or substituted in accordance with cultural "display rules."

For an emotion to occur, there must be some evaluation or *appraisal* of the emotion-eliciting event during the emotion-elicitation process. This process is typically broken down into three components: an antecedent event, the encoding of that event, and the appraisal of the event (Lazarus, 1966; Lazarus, 1982/1984; Mesquita & Frijda, 1992; Scherer, 1984a, 1984b). That is, when an event occurs, it is coded and categorized according to concerns of the individual (e.g., insult, praise, threat). An individual's emotional response is contingent upon the emotor's appraisal of the meaning of the situation; the way in which an event is interpreted and coded is influenced by his or her cultural context. Culture not only influences the conditions under which an individual will experience an emotion but it may also have a bearing on the manner of outward expression of that emotion. In other words, display rules are culturally influenced.

The cultural dichotomy of individualism and collectivism provides a basis for making specific predictions about cultural differences in emotion elicitation and influences how people modulate their responses in particular social situations. These responses include predicting differences in both the emotions experienced in response to a particular emotion-eliciting situation and differences in whether one expresses the experienced emotion and if so, in what manner the emotion is expressed.

The following sections present the major findings of this study, organized under each of the five hypotheses and associated research questions, with specific

discussion for each hypothesis. These sections are then followed by an overall presentation of study limitations and suggestions for future direction.

Major Findings and Discussion for Hypothesis Ia and Research Question One

The first hypothesis posited that Pakistanis would score higher on collectivism, as measured by the Individualism Collectivism Interpersonal Assessment Inventory (ICIAI), than would Americans. This hypothesis involved two subordinate hypotheses. The first, Hypothesis Ia, theorized that Pakistanis would be more collectivistic with family, friends, and colleagues in each of the ICIAI's two scales, i.e., values and behavioral frequency. Consistent with the reviewed literature, it was predicted that Pakistanis would be less collectivistic when considering their values towards and behaviors with strangers who are not part of their in-group. An associated research question asked if there were within and between country differences across gender in the measurement of individualism and collectivism, as measured by the ICIAI.

Recall that the ICIAI measure includes two scales: values and behaviors. That is, participants were asked how much they value each behavioral statement and how frequently they engage in particular behaviors. Because people may vary in how much they value and engage in a behavior, depending upon the identity of the person they are interacting with, the ICIAI tool asks respondents to articulate their responses to members of four different social groups (i.e., family, close friends, colleagues, and strangers). Major findings for each of the subordinate scales are presented below.

Values. The findings of this study partially supported the hypothesis. Perhaps unsurprisingly, the findings supported the prediction that Pakistanis would report more collectivistic values with respect to family members than did Americans, highlighting the importance of this in-group for Pakistani respondents. However, contrary to the hypothesis, this finding did not extend to close friends.

In regard to strangers and colleagues, the findings were more nuanced. With strangers, findings were contrary to the hypothesis that Pakistanis at large would exhibit less collectivistic values towards strangers. Instead, post hoc analyses of a significant country and gender interaction confirmed that only Pakistani female respondents were significantly less collectivistic in their values towards strangers as compared to U.S. female respondents as well as Pakistani males.

With respect to colleagues, in contrast to the hypothesis that Pakistanis would demonstrate a higher level of collectivism in their values towards colleagues than would their American counterparts, Pakistani female respondents were found to be significantly less collectivistic in their values than their Pakistani male as well as their U.S. female counterparts when a significant interaction effect was unpacked. This finding suggests that when responding to their values towards colleagues, there is an interplay of the respondent's gender and country of residence that will be discussed in a forthcoming section.

Behaviors. Once again, findings on behaviors partially supported the hypothesis. Results supported the prediction that Pakistanis would report more

collectivistic behaviors toward family members than would Americans. However, contrary to the hypothesis, this finding did not extend to close friends. In regards to strangers and colleagues, as with values, the findings were nuanced. With strangers, findings were contrary to the hypothesis that Pakistanis at large would exhibit less collectivistic behaviors towards strangers. In line with the results for the values subscale of the ICIAI, these analyses indicated that only Pakistani females were significantly less collectivistic in their behaviors with strangers as compared to U.S. females. Also, similarly, when looking specifically at Pakistani respondents, Pakistani female respondents were significantly less collectivistic in their behaviors towards strangers than Pakistani males.

With respect to colleagues, in contrast to the hypothesis that Pakistanis would show more collectivism than would U.S. respondents, a main effect for country of origin revealed that American respondents were higher on collectivism than the Pakistani comparison group. Additionally, a main gender effect suggests that males have a more collectivistic tendency in their behaviors towards colleagues than did females.

Discussion of Hypothesis Ia and Research Question One

Taken together, across the two scales, the major finding is that the Pakistanis involved in this study were indeed more collectivistic toward family. This finding was in line with Hypothesis Ia (HIa) and confirms the notion that indeed Pakistani culture is typical of this collectivistic ideology.

However, the college-age respondents from both cultures were similarly collectivistic in their values and behaviors towards friends. Here, a null finding with respect to close friends is particularly interesting as it may indicate that

Pakistani and American college students may indeed value and act towards their close friends in a similar manner, regardless of country of residence. However, noting that Pakistani participants' scores were slightly (albeit not-significantly) higher than those of American participants, it is possible that significant differences would emerge if other age groups and/or a non-college sample of individuals were included in the study sample. That is, perhaps Pakistanis with other demographic characteristics (e.g., varying socioeconomic backgrounds, educational experiences, age ranges and urban and rural residents) would be found to be significantly more collectivistic than Americans. At the same time, it should be noted that American college students are considered to be highly engaged with their peer groups (Blyth, 1982; Berndt, 1982; Furman & Buhrmester, 1992; Rich, Harris, & Parker, 1998), and this tendency may lead to more collectivistic values and attitudes with respect to peers. If so, the results found in the present investigation would stand, indicating that Pakistanis and Americans have more in common than was hypothesized in regards to those they consider close friends.

In regards to strangers and colleagues, the findings are nuanced. With strangers, findings were contrary to the hypothesis that Pakistanis at large would exhibit less collectivistic values towards strangers. Pakistani females were indeed significantly less collectivist with strangers than their American counterparts, but Pakistani males were not less collectivistic than Americans of either gender. With respect to the research question regarding possible gender differences, Pakistani females were significantly less collectivistic than Pakistani males towards

strangers. The pattern of finding for gender differences is in line with the popular discourse of women in Pakistani culture. That is, women are working to find their place in public spaces in Pakistan, a traditionally male-dominated culture in which women are typically encouraged to remain largely confined to more private domains (Chauhan, 2014). Therefore, women would not be expected to display collectivist values and behaviors towards strangers as might be expected for Pakistani men. Pakistani males are more represented in public spaces, and they are most often the main representatives of the family in these spaces. As such, and keeping in line with Islamic and cultural ideologies of welcoming others, kindness, and a general sense of brotherhood and community, this finding seems in line with cultural norms. Incidentally, this interplay of religion and culture on values and behaviors may be another reason why Pakistani male respondents were found to be more collectivistic than hypothesized. That is, Pakistani males at large view all countrymen to be a part of their in-group and *umma* (the larger Muslim community as discussed in Chapter I). Nevertheless, a study that includes religiosity as a covariate in the analysis would be an important contribution to cultural understanding within the context of shifting values and behaviors in an increasingly global market.

With respect to colleagues, the pattern of findings for collectivist values was the same as obtained for strangers. That is, in contrast to the hypothesis that Pakistanis would exhibit more collectivist values than Americans, U.S. females actually reported more collectivist values than did Pakistani females, and Pakistani females were less collectivistic in their values as compared Pakistani

males. However, these findings were not mirrored in the respondents' reports of their behaviors. Instead, male respondents across both groups were found to advocate more collectivistic behaviors towards colleagues as compared to female respondents. Here, it would be interesting to understand the interpretations of the category of "colleagues" by Pakistanis. That is, values and especially behaviors towards colleagues may be more nuanced depending on the gender of the colleague. Specifically, as previously mentioned, as Pakistani women evolve in their navigation of public spaces (i.e., college) they will have a different set of norms that guide their openness and interactions with males that they encounter in these spaces.

Major Findings and Discussion for Hypothesis Ib

Hypothesis Ib predicted that Pakistanis would score higher on collectivism on the following four subscales of the ICIAI (i.e., social identification, self-control, social harmony, and social sharing recognition) when interacting with family, friends, and colleagues, which would be consistent with their collectivistic nature. This result was not predicted to be the case for strangers who are not part of their in-group. Recall, the 19 items of the ICIAI inventory are categorized into four subscales: social harmony (i.e., including honor, tradition, loyalty, respect for elders, compromise, communication), social identification (i.e., including be like them, follow norms established by them, save face for them), self-control (i.e., including maintain self-control and exhibit proper behavior with them), and social sharing recognition (i.e., including share credit, share blame). Results of these analyses yielded a significant country level difference. When considering family,

Pakistani respondents scored significantly higher on social identification and social sharing of recognition on the values domain on ICIAI. As predicted, Pakistani respondents also scored higher on these same domains for the behaviors domain. However, Pakistani respondents did not significantly differ from their U.S. counterparts in social harmony and self-control across either domain. These results are in line with findings from Hypothesis Ia, which found that Pakistanis were more collectivistic, in their values and behaviors, with family members and further identifies specific areas of differences within the construct of collectivism.

With respect to close friends, Pakistani respondents scored higher, as compared to their American counterparts, on social identification in regards to values and behaviors. For the behaviors domain only, Pakistani respondents scored higher on social sharing of recognition. These results are partly in line with findings from Hypothesis Ia, which found that Pakistanis were not more collectivistic, in their values and behaviors, with close friends and instead suggest a very specific area of cross-cultural differences in the respondent groups' consideration of close friends.

When considering strangers, U.S respondents exhibited significantly more self-control than their Pakistani counterparts. Finally, when considering colleagues, U.S. respondents scored higher on self-control for values and behaviors and higher on social harmony for their behaviors than their Pakistani counterparts, which did not support the hypothesis. Recall that results of colleagues and strangers from Hypothesis Ia were nuanced by gender and country of origin. Taken together results from Hypothesis Ia and Ib suggests that there is

complex set of parameters that govern a respondent's values and behaviors towards strangers and colleagues.

Major Findings and Discussion for Hypotheses II and III

Hypotheses II and III sought to confirm that respondents from each country would produce stories representative of their cultural perspective. That is, Pakistanis would construct emotion-eliciting events that were more consistent with values associated with collectivism than would U.S. respondents (HII), while Americans would construct emotion-eliciting events that were more consistent with individualistic values (HIII). Significance testing for these hypotheses yielded nonsignificant findings for stories about happiness, anger, pride, and shame. However, results for stories eliciting sadness were significant yet contrary to study predictions. Results for each emotion are presented below. While analysis for stories eliciting happiness, anger, pride, and shame were not significant, trends in the themes of these stories are included for the purpose of discussion.

Sadness. U.S. respondents produced significantly more collectivistic stories eliciting sadness than did Pakistani respondents (U.S. = 95%, Pakistani = 85%). This finding was counter to the hypothesis that each cultural group would produce stories more in line with their country's dominant cultural value system. Recall, however, that these analyses did not account for the content or interactants of the produced emotion-eliciting event and that previous analyses of HIa found that Pakistani respondents value and behave with a greater collectivistic tendency towards family members. Thus, a set of analyses were conducted to see if stories

with family members as characters or interactants yielded a significantly higher proportion of collectivistic themes. However, no significant findings were noted. That is, Pakistani respondents did not significantly differ in the proportion of collectivistic stories that they wrote about family members or containing family members in comparison to their American colleagues.

Additionally, informal data inspection showed that the respondents from both cultures told stories with similar themes. That is, themes of the sadness-eliciting stories for all respondents indicated that a majority of these stories involved the death or sickness of a loved one followed closely by themes of relational discord. It is possible that these are the most commonly accessible themes for the college-age respondents. It had been hoped that the study design would elicit a larger variety of themes from each respondent group. However, it is feasible to assume that these events are common, and thus easier to recall, for these respondents (Burke et al., 1992; Lewis, 2000).

A still closer look at stories eliciting sadness produced by Pakistani respondents yielded some additional themes that were classified differently by U.S. respondents. For example, in addition to the collectivistic sad themes noted above, themes related to lack of personal accomplishment were also presented. For instance, one Pakistani female respondent shared, “When I got to know my high school result, and that totally broke my heart. I was a medical student and wanted to do masters in pharmacy, but my grades weren't good enough. I cried for days and days.” Similarly, a Pakistani male respondent commented that “When I don't achieve the targets of study and I don't get good grades I am very sad.”

Interestingly, the lack of personal accomplishment theme, was noted as eliciting shame for U.S. respondents. For example, two U.S. female respondents produced the following stories as shame eliciting events: “When I did really poorly on the SATs” and “A time I felt shame was when I did poorly on my midterm. I did not study as much as I should've. I know if I put in more effort, I could have done an outstanding job.” It could be that both groups of respondents feel shame and sadness as a blend but that the more dominant emotion varied for each group. The methodology of this study did allow for an understanding of blended emotional experiences. Alternatively, the two cultural groups may tend to appraise academic failure differently such that U.S. students perceive it as reflecting a more intrinsic personal deficit, an appraisal associated with shame more than sadness (Camras & Fatani, 2004).

Happiness. For the happiness-eliciting stories, the majority of stories written by both Pakistani and U.S. respondents were coded as *socially bonding* (e.g., feeling loved by an in-group member, spending time with friends) and thus as representative of collectivistic values. Closer examination of these stories indicated that, albeit nonsignificant, a slightly greater proportion of U.S. respondents wrote happiness-eliciting stories that were categorized as collectivist than did Pakistani respondents. This trend was contrary to the hypothesis that U.S. respondents would write stories that were aligned with their individualistic cultural values. However, this finding may be once again indicative of the fact that respondents were mainly college students. That is, U.S. stories of happiness were typically involved an intimate other. For example, a U.S. male referred to a

romantic intimate other when he mentioned, “Taking a long road trip with the girl I have feelings for. It was just a great time!” Similarly, a Pakistani female referred to deriving happiness with close friends, “The most recent happiest day was when my friends gave me a surprise birthday party.” These activities are common to the respondents’ age group and their involvement with peers. Thus, happiness may be elicited by similar activities for college students across different cultures.

Anger. There was a tendency (albeit nonsignificant) for respondents to write anger-eliciting stories that were in line with their respective cultural value systems. Nevertheless, informal inspection of these data indicated that relational discord was noted as a common and frequent theme for anger in both cultures. Examples of these stories include: “When my best friend didn't tell me she was seeing my ex-boyfriend and would give me advice on him” (written by a U.S. female participant), and “When any of my friends hide to [sic] me or lie to me, I feel really angry as I think there should be a trust among us and it makes me feel down and angry” (written by a Pakistani female respondent).

A deeper dive into the anger-eliciting stories presented another interesting finding. That is, Pakistani and U.S. respondents both had a higher number of stories representing individualistic values (in comparison to collectivistic values) when there was a stranger or colleague in their stories about anger. For example, as written by a U.S. female:

> I was angry recently when I came home and found my apartment a complete mess. My roommates threw a party and didn't clean up after it. When I confronted my roommate about the situation, she

> said she would get to it later. This made me even more mad.

Likewise, the following submission from a Pakistani male respondent revealed individualistic values in his story about anger:

> In my last semester there was a teacher who screamed at me and blamed me that I cheated in [sic] the quiz but there was a boy I didn't know how he copied my quiz and my teacher blamed me . . . because that boy was relative of that teacher. I don't know what to say now, but I was really anger [sic] on that complete act.

In both these instances, anger was elicited with another person based on a violation of personal rights. Still, U.S. participants produced an even higher proportion of individualistic stories than did Pakistanis. This finding suggests a cultural difference still may exist, although it is not as extreme as was hypothesized in this study.

Pride. There was a tendency (albeit nonsignificant) for respondents to write stories about pride that were mostly in line with their respective cultural value systems. That is, the majority of pride stories written by Pakistanis were categorized as collectivistic (58.67%), while the majority written by Americans were individualistic (54.05%). Of particular interest, informal data inspection showed that most pride stories categorized as individualistic involved personal accomplishment and incorporated the common theme of school, irrespective of whether they were produced by U.S. or Pakistani students. For example, a U.S. female respondent wrote, “I feel pride whenever I do well in school — this feeling motivates me to continue to be successful.” Similarly, a Pakistani female

respondent shared, “I felt proud when I put great effort into a project and got an approving reaction from my classmates.” These examples illustrate a shared set of emotional experiences for college students across cultural groups.

Similarly, pride stories depicting collectivistic values were often reflective of pride in family or in-group irrespective of whether they were produced by U.S. or Pakistani participants. For example, a U.S. female respondent shared, “My dad started crying when I told him I had finally been accepted into college. He immediately told as many people as he possibly could.” Similarly, a Pakistani female respondent shared,

> My father works in Saudi Arabia as a safety enginer. When i went their [sic] I saw that everyone gave them a lot of respect and follow his orders . When i saw all this I felt proud to be a daughter of most respected person.

Shame. The majority of shame-eliciting stories from both cultures represented collectivist values. Unexpectedly, U.S. respondents wrote an even higher percentage of collectivistic stories than did the Pakistani students (U.S. = 61.11%; Pakistani = 52.94%). Informal data inspection showed that the respondents from both cultures told stories with similar themes. For example, a Pakistani female respondent wrote:

> I once misbehaved very badly with my mother. She was so hurt that she said to me that I should be ashamed of myself and cried also. And truly I was very ashamed of myself. I couldn't even face myself. Then I went to her and apologized, and she forgave me. I told her that I felt sorry and ashamed.

Similarly, a U.S. female respondent also chose to relate a story involving a family member:

> I felt shameful for my little sister when she got in a car accident before she went on her driving test. She is a very good driver, but did not look out of one mirror! She is usually very careful, but now she knows that just one forgetful mistake can be a very expensive mistake.

Although both of these examples exemplify collectivistic values, according to HII and HIII, the example presented by the U.S. student should have been more typical of Pakistani respondents and not U.S. participants. Thus, once again, overall these findings suggest that Pakistani college students are more like U.S. college students than was originally theorized in this study.

Taken together, these findings suggest that the two respondent groups have more in common than originally postulated. A methodological concern that may have unintendedly led to these null findings will be discussed later in this chapter. That said, these overarching null results are indicative of the shared cross-cultural experiences of these college age respondents. For the most part, the daily experiences of these respondents are filled with navigating relationships, celebrating successes, and mourning losses and failures, notwithstanding some contextual differences (e.g., American students who often lived on campus and Pakistani students who lived at home with their families). These are commonalities that we can celebrate given the current geopolitical climate.

Major Findings and Discussion for Hypothesis IV and Research Question Two

Hypothesis IV (HIV) proposed that emotional expressivity would vary by the social context of the produced emotion-eliciting event. That is, Pakistanis respondents would be as emotionally expressive as their U.S. counterparts in social bonding contexts (i.e., stories that describe social bonding in which the expression of emotion would be considered to enhance the relationship between interacting partners). Conversely, in contexts which the expression of the felt emotion would foster discord, U.S. participants would be more expressive with all emotions.

As reviewed in Chapter III, the quality of the data did not allow for the analysis of social context as proposed. Instead, a simplified set of analyses were conducted to determine if there were country level differences in the average tendency to express each emotion as intensely as it was felt. Results indicate a significant main effect for country and emotion with a near significant interaction effect. Examination of means and significant post hoc tests reveal that U.S. respondents were significantly more likely to express emotion as felt than Pakistani respondents. When teasing apart the main effects for emotions, it was found that happiness was significantly more likely to be expressed as felt than was anger, sadness, and shame. Additionally, there was a significant difference in the expression of pride and shame with respondents more likely to express feelings of pride.

Additional inspection of the country level means for each emotion indicated that the greatest differences, although nonsignificant, between countries occurred for happiness, sadness, and pride with U.S. participants scoring higher than Pakistani participants. However, with the previously stated data limitations, it was difficult to identify the source of this difference. Instead, an associated research question attempted to tease apart this finding by further understanding the nature of the expression itself.

Recall that research question two investigated cultural differences in respondents' forced choice of one display option among seven options that were presented (e.g., express emotion as you feel it, hide your emotion by showing another one, etc.). Recall from Chapter III that these data were analyzed using chi-square tests with post hoc analyses that followed the method described by Beasley and Schumacker (1995). Results will be discussed only for those emotions for which significant differences were yielded in the chi-square analyses.

Anger. While the overall chi-square analysis for this emotion yielded a significant test statistic, post hoc analyses indicated nonsignificant trends. Results indicated a tendency for U.S. participants to espouse the second response option (express your anger just as you feel it) less than expected whereas their Pakistani counterparts selected this option with greater frequency than would be expected. Conversely, U.S. participants espoused the third emotional display option (show less anger than you feel) and the fifth option (hide your feeling of anger by showing nothing) more than expected. In contrast, their Pakistani counterparts

selected these options with less than expected frequency. Interestingly, the notion of Pakistanis having a greater comfort with expressing anger has been noted elsewhere. The Canadian Global Affairs web pages, on the topic of Pakistani culture, points to the comfort by which Pakistanis express their anger in public spaces particularly as exacerbated by everyday living circumstances (e.g., load shedding).

It should be note, that although nonsignificant, these trends were seemingly counterintuitive to and inconsistent with the overall finding from Hypothesis IV that U.S. respondents appeared to be more expressive that Pakistani respondents. However, recall that country-level means for anger show Pakistani and American respondents to report similar levels of felt anger (see Chapter III Table 21) and that the results for the main effect of emotion and near significant interaction for country and emotion seem to indicate the driver of these country level differences to be the expression of happiness and pride and, to a lesser extent, sadness.

Sadness. While the overall chi-square analysis for this emotion yielded a significant test statistic, post hoc analyses indicated nonsignificant trends. Post hoc analysis yielded a nonsignificant tendency for U.S. respondents to espouse the first response option (show more sadness than you feel) less than expected whereas their Pakistani counterparts selected this display option more than expected. Conversely, and yet again in line with findings for anger, U.S. respondents selected the third response option (show less sadness than you actually feel) more than expected, while Pakistani respondents selected this

response option less than expected. Recall that the majority of sadness-eliciting stories written by both respondent groups were found to represent collectivistic values. They also frequently involved the death or sickness of a loved one or spoke of relational discord. Thus, while these are instances in which expressing feelings of sadness would conceivably not be seen as disruptive to the relationship, it is interesting that American respondents tended to mute or mask their feelings of sadness.

Once again, although nonsignificant, these trends appear counterintuitive to Hypothesis IV and inconsistent with the findings for that Hypothesis, i.e., that U.S. respondents were more expressive that Pakistani respondents overall and country-level means specifically for sadness that show American respondents to report higher levels of expressing felt sadness (see Chapter III Table 21). However, it is possible that these counterintuitive findings for Research Question 2 and the inconsistency between findings for Hypothesis IV and Research Question 2 are a product of a fine-grained difference in the wording of the two items and/or how they were interpreted differently by respondents from the two cultures. Recall that the item related to HIV asked about probability (i.e., "How likely are you to show your emotion as you feel it to the other person?") while the item related to Research Question 2 asked about manner or intensity (i.e., "In what manner, if at all, did you express your X to the other person?" with response options representing more or less intensity). Possibly respondents interpreted the first question as asking about probability of showing the emotion at all (rather than showing the emotion only at the intensity that you feel it) and thus U.S.

respondents scored higher for this item. In contrast, the second question might have been viewed as further querying into the manner in which the respondent would display the emotion (e.g., show more sadness than you actually feel, show less sadness than you actually feel, etc.). Thus Pakistani respondents might have more often chosen the option of "show more sadness than you actually feel" because of social norms regarding the intensity (but not the frequency) of sadness displays while U.S. participants may have favored the "show less sadness" option because of their own cultural norms. While speculative, this proposal might be profitably explored in future research.

Happiness. While the overall chi-square analysis for this emotion yielded a significant test statistic, post hoc analyses indicated nonsignificant trends. Post hoc analysis yielded a nonsignificant tendency for U.S. respondents to espouse the first response option (show more happiness than you feel) less than expected whereas their Pakistani counterparts selected this display option more than expected. Conversely, although also not significant, U.S. respondents selected the second response option (express your happiness just as you feel it) more than expected, while Pakistani respondents selected this response option less than expected. Recall that the majority of happiness-eliciting stories written by both Pakistanis and U.S. respondents were coded as *socially bonding* (e.g., feeling love by in-group member, spending time with friends), Thus, it would follow that Pakistanis and Americans would be likely to show this emotion as felt or with some exaggeration, particularly as doing so would serve to foster any interpersonal relationships that might have been referenced. For Pakistani

respondents in particular, this tendency for exaggeration as associated with social bonding might be aligned to Pakistani collectivism in which positive emotions are emphasized when they serve to strengthen the bond with in-group members. Although nonsignificant, this trend was in line with the overall finding from Hypothesis IV that found U.S. respondents to more expressive that Pakistani respondents and country level means for happiness that show American respondents report higher levels of felt happiness (see Chapter III Table 21).

Taken together, while the proposed hypothesis was not addressed, the simplified analyses conducted indicated that Americans respondents were the more expressive group. It was also found that happiness, sadness, and pride are more likely to be expressed than anger and shame. However, while interesting, and given the nonsignificant trends noted above, these significant trends should be unpacked in future studies.

Major Findings and Discussion for HV

The fifth hypothesis, Hypothesis V (HV), predicted that a religiosity survey constructed for this study would be found to be valid and reliable with participants from Pakistan and well as the U.S. participants. Findings did provide some support for this hypothesis.

Recall the seven-item religiosity survey (see Appendix C) was developed to investigate respondent's level of religiosity. The first item in the survey was an open-ended item that established the religious affiliation of the respondent and was followed by a self-reported level of religiosity. This second item was then used to assess criterion validity (as reviewed below). The remaining items

determined the importance of and the reference to religious beliefs in daily life as well as the amount of time spent on religious practices and events.

The created scale yielded an overall moderate criterion validity statistic of .727. However, country-level correlation statistics indicated a lack of correspondence in the performance of these items between the two respondent groups. That is, analyses reveal a stronger correlation between test items and the criterion item (item 2) for U.S. respondents ($r = .79$, $p < .001$) than their Pakistan counterparts ($r = .30$, $p < .001$). Additionally, internal consistency statistic for the items relating to the importance of and the reference to religious beliefs in daily life yielded an acceptable scale reliability (Cronbach's alpha = .95) as did the internal consistency for the items pertaining to the amount of time spent on religious practices and events (Cronbach's alpha = .70). Taken together, while the internal consistency was found to be acceptable, the moderate and disparate findings for validity indicate the need for further refinement of the measure and thus the research questions related to the influences of religiosity on emotional elicitation and subsequent emotional display responses were not addressed in the current study.

To explain the less satisfactory results obtained for the validity analysis applied to Pakistani respondents, perhaps, further consideration towards the unique interdependency between the construction of Pakistani life and Islam is necessary. That is, it is plausible that Islam plays such an integral role in the construction of society that is unnatural for respondents to think about religiosity in the same manner as American respondents do. For example, in thinking about

the Pakistani context, it may be that items such as the number of hours one spends a week attending religious events or performing religious rituals and practices is confounded by the organization of typical day in Pakistani day which is inherently organized around certain Islamic rituals such as prayer. The call for prayer can be heard in every city and village of Pakistan 5 times a day and so going to pray may not be seen as much as religious dedication as a routine part of the day and a community activity that brings friends, family and neighbors together.

Similarly, attending Friday prayers is as much a social endeavor as it a religious ritual in that is a forum for community members to meet and share the going ons of the week after hearing the Imam give his religious sermon and community updates. Most often Friday's are a half day at work with the majority of shops and bussiness closing for an hour and a half during this time to allow employees to attend prayers and share a meal with family and friends. Thus, it is reasonable that respondents may not perceive attending/performing prayer as related their personal sense of religiosity.

Religion clearly does play a strong part in the organization of Pakistani societal norms. While there is broad consensus that Islam is a collectivistic religion (Ahuja, 2008; Croucher, Turner, Anarbaeva, Oommen, & Borton, 2008). Pakistan and more particularly Islam in Pakistan is a quickly evolving practice. Thus, it is reasonable that religiosity among Pakistanis will vary, and such variation may be related to within-country differences in values and behaviors regarding emotional expression. As will be noted again below, these differences

would be an important direction for future research once a valid and reliable measure is identified.

Overall Study Limitations and Future Directions

Hypotheses Ia, Ib, II, III, IV, and V employed country of residence and gender as variables to research cultural values. Using written responses from U.S. and Pakistani participants, this study had several limitations. This section will explore those limitations and suggest directions for future research.

Conceptualization of cultural values. In this study, country of residence was used to categorize the shared cultural beliefs and values of the respondent. This methodology, although widely used, failed to account for the within group variability that exists within cultures, let alone entire nations. Thus, it constitutes a limitation of the present study. Previous research (e.g. Earley & Gibson, 1998; Kagitcibasi, 1997; Oyserman, Coon, Kemmelmeier, 2002; Oyserman, 2006; Brewer and Chen, 2007; Bond, 1991; Nishida, 1996; Ruby et al., 2012; Kapoor et al., 2003) suggested that individualism/collectivism, high/low context, and independent/interdependent self-construal will vary within cultures because of demographic, regional, class, and other differences found within a given society. Given the variation found within groups, presuming that Pakistan is a homogeneous collectivistic society may be a faulty premise.

Another limitation may be the conceptualization of collectivism drawn chiefly from research in non-Muslim societies. In this study, it may have been prudent to first ascertain a general sense of person-level cultural values, beliefs, and identity within each group and then work to elicit and describe the effects of

these perceptions on the participants' values and behaviors towards various in- and out- group members.

Indeed, there may be a need to look beyond the Individualism/Collectivism dichotomy to better understand these cultures. Recently, a different dichotomy of cultural values known as *Holism/Analytic* has been proposed by Lim (Lim, 2009; Lim & Giles, 2007; Kim et al., 2010) and may be an alternative way of looking at cultural differences. Holism is the tendency to see everything as a whole. This concept is not new; holism in east Asia can be traced back to the organic holism of Confucianism, Taoism, and Buddhism. This perspective is based on the belief that the universe is a vast integrated unit (Tucker, 2002 as cited in Lim 2011). As such, a family of five is not a collective of five individuals, but a single entity with a shared identity. One family member's behavior is considered not as the individual's performance but as a part of the family's conduct (Lim, 2011, p. 25).

The idea of holism as a frame for understanding cultural differences has received support in recent studies (Kim, Lim, Dindia, and Burrell 2010; Lim, Kim, and Kim, 2011; Nisbett et al., 2001). For example, Kim et al. (2010) developed a measure of holism which was tested alongside measure of relativity, independent and interdependent self-construals. Comparative results from a South Korean and American college-age sample demonstrated that South Koreans were overall significantly more holistic in their worldviews than were U.S. participants and that holism was found to be a more foundational factor, accounting for more variance of cultural differences than I/C (as measured by

items on Oyserman et al.'s 2002 work) or interdependent/independent self-construals (as measured by Gudykunst and Nishida's 2004 shorted self-construal scale). Although the authors themselves cited the need for more empirical support, initial findings were in line with some of the mixed results found in the current study. Specifically, Kim et al. (2010) found that South Koreans were as individualistic as people in the U.S. and that people in the U.S. were as collectivistic as Koreans. In other words, the individualism/collectivism distinction was not adequate for characterizing the important differences that do exist between the two cultures.

Study design limitations. Several features of the design and procedures may have been problematic in this study. The following section describes potential limitations of the methodologies that were used.

Story production methodology. Based on methodological issues noted in the literature (e.g., Boucher & Brandt, 1981) much consideration was given to ways in which to ensure the production of richer, more detailed emotion-eliciting events. To this end, the following prompt was included in the story production section:

> Once again, thank you for your participation. In this last survey, we are asking you to write about situations in which you felt these emotions: sad, happy, ashamed, angry, and pride. Please write your description in the place provided. In writing your descriptions, try and think of situations that are typical of your behaviors and your values. Please describe a situation in which you were interacting with only one other person. Be sure to indicate why the situation you describe made you feel the emotion that you are writing about. Also, provide information about the other character in the situation, including their relationship to you and their gender. Please provide as much detail as possible about

> the background and the events that led you to experience the emotion.

Theoretically, this prompt would have yielded rich, detailed descriptions that would lend themselves to the proposed analyses. However, they also may have unwittingly biased the results. First, asking for an interactant to be present may have resulted in skewed data. That is, the supposition that U.S. respondents would write more stories that reflected individualistic values in which the person is the center of those experiences (i.e., I went to see a movie I really liked) may have been offset by the direct instruction to include an interactant.

Next, the lack of additional detail in the produced stories presented concerns because the specific source of the emotion elicited was often hard to identify. For example, One American male respondent reported happiness as "Saw a TV show (The Roast of Joan Rivers) with friend. He didn't understand it all but I made sure he understood most of the jokes" the same respondent also reported anger as "Had a fight with a friend who overly used drugs and alcohol one weekend."

The study design did not afford an opportunity to check these responses or probe for additional event appraisal information (i.e., via interview format). This probing may have led to a different categorization of the story (i.e., representing collectivistic vs. individualistic values), such as I was happy when I found out I got top marks in the class because I studied really hard and because I want to do good in school and make my parents proud. Lastly, while the issues in attaining interrater reliability are documented in detail elsewhere in this document, it is worth noting the manner in which story interactants were categorized. In the

current study, we looked at family, friends, colleagues, and strangers. At various points during the coding process, we struggled to determine how to categorize persons with particular relationships to the respondent. For instance, it was decided that intimate others (i.e., nonfamily members) would be categorized as friends. It initially appeared that the reasoning behind the criteria for assigning the code in this manner made sense. For example, a boyfriend or girlfriend is certainly not a family member. However, intimacy with one's boyfriend or girlfriend may vary as may intimacy with family members. These differences might affect one's emotional expression toward different persons who were placed in the same category.

***Unequal sample sizes*.** While some of the analyses considered the influence of gender and yielded significant findings, it should be noted that there was a disparate number of males and females participating in the study. These unequal sample sizes could have potentially skewed the findings of these analyses. Efforts should be made to look at the effects of these small group sizes through more sophisticated data analysis methods or additional collection of data from males.

***Sample selection*.** It may be that elements related to that of youth culture or university culture contributed to the finding that Pakistani college students have much in common with American college students. That being said, the inclusion of a more diverse (e.g., varying socio-economic backgrounds, educational experiences, age ranges, and geographic residents) sample would inform the broader literature.

Additionally, it is important to note that a little over 50% of Pakistani respondents' fathers and 40% of respondents' mothers possessed a college or advanced degree. These literacy levels are not enjoyed by many in Pakistan. According to the UNESCO's 2009 Global Education Digest, 6% of Pakistanis (9% of men and 3.5% of women) were university graduates as of 2007. Thus, the Pakistani students who participated in this study and their families were not representative of the greater Pakistani society in this regard, a factor that may have influenced participants' responses.

Analyses limitations. It is suggested that future studies examine the psychometric properties of the constructed religiosity survey using Rasch analysis. The Rasch model (Rasch, 1980) provides diagnostic information on the quality of a measurement tool. It yields a comprehensive and informative picture of the construct under measurement as well as the respondents' tendencies for that measure. Applying the Rasch model allows for the examination of item/construct fit as well as the identification of possible misinterpretations with item or response options. When data fit the Rasch model, it provides estimates for persons and items that are not dependent upon the particularities of the item used in the questionnaire or of the individuals with the response frame (Wright, 1977; Wright and Masters, 1982). This form of analysis will not only allow for refinement of the scale; a Rasch analysis will provide a deeper understanding of how the two cultural groups respond to the given items.

Implications and recommendations. The findings in this study can contribute to efforts being made to increase Americans' cultural competence.

Cultural competence is having an awareness of one's own and also others' cultural identity. It also includes an awareness of within- and between-group differences and the ability to learn and build on the varying cultural and community norms. It is the ability to understand the within-group differences that make each individual unique, while also appreciating the between-group variations (Bennett, 2009; Cross et al., 1989; Fantini, 2009; Lustig and Koester, 2003). This understanding could inform a variety of programs ranging from those designed to improve teaching practices by infusing them with cultural sensitivity to those intended to increase understanding of the complexities of economic globalization.

The null findings obtained in this study also have implications for understanding the two cultures that were investigated. While the study was small in scope, its findings suggest the important possibility that Pakistani Muslim students are more like U.S. students than might be expected, particularly regarding their values and behaviors related to emotion-eliciting events in various social contexts. For example, it is interesting to note that evidence in this study demonstrated that Pakistani students' overarching moments of happiness and sadness along with their causes for anger, pride and shame are similar to their U.S. counterparts.

Discussion Summary

This study examined cultural differences in the construction of emotion-eliciting events and the associated display rules for exhibiting those emotional responses to others embedded within the cultural classification system known as

Individualism/Collectivism. While some cultural differences were found, similarities between the two respondent groups predominated.

The findings in this study can aid efforts to increase cultural competence with broad applicability in a variety of arenas ranging from improvements upon teaching practices in the culturally competent educator's classroom to understanding the complexities of economic globalization. Albeit small in scope, this study is an important contribution to the literature on cultural values.

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Appendix A.

Recruitment Email for Pakistani Students and Professors

My name is Serah Fatani. I am a graduate student at DePaul University, pursuing a doctorate in Experimental Psychology. Currently I am interested in investigating cultural differences in emotion-eliciting events, and the expression of those elicited emotions to others. I am looking to collect data on College students in Karachi. I am writing in the hopes that you might allow to me to administer the study to your students.

Administration of the study is flexible to best meet your needs. The first two options involve the use of class time, while the third is an online option. The first option would involve about an hour of class time. In this option, I would visit your classroom and administer the survey to your students during class time. Alternatively, to minimize disruption to your class, the second option involves taking about 10 minutes to introduce and hand out my study materials, returning at a later date to collect the completed surveys. In this option, students can take home the study materials and complete them outside of the classroom. Finally, the complete study is available online. You can choose to simply ask your students to participate in my online study and direct them to my webpage. Students can log on to the website and complete the surveys at their own convenience.

Students' participation in this study is completely voluntary. They will be asked to complete a series of 3 surveys. The first of which will query a series of demographic items, such as age, gender, ethnicity and 9 questions regarding their religious affiliation and beliefs. I estimate that it will take less than 3 minutes to

complete this section. Next, they will be asked to complete a second survey that will ask about their values and behaviors when interacting with members of four social groups; family, close friends, colleagues, and strangers. This is a 38 item questionnaire in which they will indicate their degree of agreement with each statement on a scale of 0 - 6 (not at all important to very important). This survey is estimated to take 10 minutes to complete. Finally, students will be presented with 5 emotions and asked to write a short (5-6 line) scenario in which a typical Pakistani may feel that emotion. I estimate that it will take about 30 minutes to write 5 stories.

As a further note, all materials have been approved by the DePaul Human Subject Review board. This board is designed to review the scientific merit of all DePaul-affiliated research activities and to ensure protection of the rights of participants in compliance with the rules and regulation set by the Federal Office of Human Research Protection in the United States.

If you, or any other member of the faculty, is interested in having your students participate, please contact me. I will be visiting Karachi for a period of three weeks in which I hope to complete the data collection process.

Appendix B.

Classroom Recruitment Script

I am a Pakistani-American researcher from DePaul University in the US. I am interested in examining emotions in various cultures. Currently I am interested in learning about the different situations in which different emotions occur in Pakistanis and Americans. As such, I am asking for your participation in my current data collection effort.

Participation in this study is completely voluntary. First you will be presented with a series of demographic items, such as age, gender, ethnicity and 9 questions regarding your religious affiliation and beliefs. I estimate that it will take less than 3 minutes to complete this section. I will also be asking you to complete a second survey that will ask you about your values and behaviors when interacting with four social groups; family, close friends, colleagues, and strangers. This is a 38 item questionnaire in which you will indicate your degree of agreement with each statement on a scale of 0 - 6 (not at all important to very important). This survey is estimated to take 10 minutes to complete. Finally, you will be presented with 5 emotions and asked to write a short (5-6 line) scenario in which a typical Pakistani may feel that emotion. I estimate that it will take about 30 minutes to write 5 stories.

I understand that some of you may not want to participate in this study. If you do not participate, you will not be penalized in any way. Also, if you decide to participate but you feel uncomfortable as you are answering any of the questions, you will be free to not answer them or to stop participating at any time

during the session. If you decide to stop participating, it is okay with us and you will not be penalized in any way. Does anyone have any questions about this study? (Answer any questions). If you choose not to participate, please continue with your class work [or other activity as assigned by the classroom instructor]. In a minute I will be passing out packet with the questionnaires. Please review the information sheet and retain it for your records. Does anyone have any questions? (Answer any questions).

Appendix C.

Study Survey

Project Information and Consent for Participation Sheet: Pakistani Classroom Version

Please review this form carefully before proceeding. This study contains four short questionnaires. The first questionnaire has a set of 13 questions that are designed to gather background information. Here we will ask questions including your age, ethnicity, and gender.

The next questionnaire asks questions regarding your religious beliefs and practices. This section has 9 items.

The third questionnaire will ask you about your values and behaviors when interacting with four social groups: family, close friends, colleagues, and strangers. This is a 38 item questionnaire in which you will indicate how much you agree with each statement on a scale of 0 - 6 (not at all important to very important).

Finally, in the fourth questionnaire we are interested in learning about the different types of situations that may cause someone in Pakistan to feel different emotions. The emotions that we are interested in are: happiness, sadness, anger, pride, and shame.

I understand that some of you may not want to participate in this study. If you do not participate, you will not be penalized in any way. Also, if you decide to participate but you feel uncomfortable as you are answering any of the questions, you will be free to not answer them or to stop participating at any time during the session. If you decide to stop participating, it is okay with us and you will not be penalized in any way.

Note: This study has been reviewed by the DePaul University IRB which has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions, concerns or reports regarding your rights as a research subject, please contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

Project Information and Consent for Participation Sheet: Pakistani Online Version
Please review this form carefully before proceeding.
This study contains four short questionnaires. The first questionnaire has a set of 13 questions that are designed to gather background information. Here we will ask questions including your age, ethnicity, and gender.

The next questionnaire asks questions regarding your religious beliefs and practices. This section has 9 items.

The third questionnaire will ask you about your values and behaviors when interacting with four social groups: family, close friends, colleagues, and strangers. This is a 38 item questionnaire in which you will indicate how much you agree with each statement on a scale of 0 - 6 (not at all important to very important).

Finally, in the fourth questionnaire we are interested in learning about the different types of situations that may cause someone in Pakistan to feel different emotions. The emotions that we are interested in are: happiness, sadness, anger, pride, and shame.

No identifying information such as you name or email address will be gathered. You may choose to stop participation in the study at any time.

If you have further questions or concerns before deciding to participate please contact Serah Fatani at (773)325-4252 or via email at Sfatani@depaul.edu (will also add a local cell phone number).

Note: This study has been reviewed by the DePaul University IRB which has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions, concerns or reports regarding your rights as a research subject, please contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

Project Information and Consent for Participation Sheet: American Version

Please review this form carefully before proceeding.
This study contains four short questionnaires. The first questionnaire has a set of 13 questions that are designed to gather background information. Here we will ask questions including your age, ethnicity, and gender.

The next questionnaire asks questions regarding your religious beliefs and practices. This section has 9 items.

The third questionnaire will ask you about your values and behaviors when interacting with four social groups: family, close friends, colleagues, and strangers. This is a 38 item questionnaire in which you will indicate how much you agree with each statement on a scale of 0 - 6 (not at all important to very important).

Finally, in the fourth questionnaire we are interested in learning about the different types of situations that may cause someone to feel different emotions. The emotions that we are interested in are: happiness, sadness, anger, pride, and shame.

No identifying information such as you name or email address will be gathered. You may choose to stop participation in the study at any time.

It you have further questions or concerns before deciding to participate please contact Serah Fatani at (773)325-4252 or via email at Sfatani@depaul.edu (will also add a local cell phone number).

Note: This study has been reviewed by DePaul University IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions, concerns or reports regarding your rights as a research subject, please contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

Demographic Questions

Please enter your gender
Male
Female

Please enter your age: _____

Please enter your ethnicity (i.e. Pakistani, Urdu speaking, Punjabi, Sindhi, Parsi or however you identify yourself)._____

Have your traveled/lived outside of Pakistan?
(If "YES" then please answer Question 5, if "No" then please proceed to Question 6)
Yes
No

If YES, please list the country and the amount of time your spent in that country over time

_____
(Name of country: time in years, months, and weeks)

_____
(Name of country: time in years, months, and weeks)

_____
(Name of country: time in years, months, and weeks)

Are you married?
Yes
No

What is your current living situation
Living with friends
Living alone
Living with family
Living with a roommate
Living with significant other/spouse
Other (please specify)
_____

How many people live in your house (Please exclude domestic workers i.e. driver, maid, etc).
Adults: _____
Children: _____

If your father works (either outside the home or within your home), what is his job title? (Please give an approximation even if you are not certain.)

_____
_____

How far did your father go in school?
Less than 7th grade

If your mother works (either outside the home or within your home), what is her job title? (Please give an approximation even if you are not certain.)

_____
_____

How far did your mother go in school?
Less than 7th grade
7th to 9th grade
Some high school/Lower Secondary

7th to 9th grade
Some high school/Lower Secondary
High school graduate/GED/Upper Secondary/Metric/ O levels
Some college/A Levels
College graduate (i.e. B.A, B.S.)
Graduate/professional school (i.e MA, MS, Ph.D)
Other (please specify)
_____

Are there any other adults that work in your home? (if "Yes" then proceed to question 14, if "No" then else proceed to the Religiosity section)
Yes
No
What is their job title? (Please give an approximation even if you are not certain.)
_____
What is their relationship to you?
_____

High school graduate/GED/Upper Secondary/Metric/ O levels
Some college/A Levels
College graduate (i.e. B.A, B.S.)
Graduate/professional school (i.e MA, MS, Ph.D)
Other (please specify)
_____

How far did this person go in school?
Less than 7th grade
7th to 9th grade
Some high school/Lower Secondary
High school graduate/GED/Upper Secondary/Metric/ O levels
Some college/A Levels
College graduate (i.e. B.A, B.S.)
Graduate/professional school (i.e MA, MS, Ph.D)
Other (please specify)

Religiosity Section
What is your religion? _____
In general, would you consider yourself:
Deeply religious
Fairly religious
Religious
Only slightly religious
Not at all religious
Against religion

	Not at all important						Very Important
In general, how important are religious or spiritual beliefs in your day-to-day life?	0	1	2	3	4	5	6
In general, how important are religious or spiritual beliefs in the way you interact with others?	0	1	2	3	4	5	6
In general, when you have problems or difficulties in your	0	1	2	3	4	5	6

work, family, or personal life, how often do you seek spiritual comfort?							
In general, how important has religion been as a guiding force in your life?	0	1	2	3	4	5	6
In general, how important are religious or spiritual beliefs in the manner in which you conduct yourself with others?	0	1	2	3	4	5	6

On average, how many hours a week do you dedicate to religious or spiritual rituals or practices (i.e. prayer and performing religious rituals)?
None

- Less than one hour a week
- One to 3 hours a week
- Over 3 hours and less than 6 hours a week
- 6 or more hours a week

On average, how many hours a week do you dedicate to attending religious or spiritual events (i.e. bible study, Quran classes, church fundraisers, religious lectures)?

- 0 None
- Less than one hour a week
- One to 3 hours a week
- Over 3 hours and less than 6 hours a week
- 6 or more hours a week

Values and Behaviors Section

This is a questionnaire about your values and behaviors when interacting with others. We would like to ask you about your values and behaviors when interacting with people in four different types of relationships: (1) Your Family; (2) Close Friends; (3) Colleagues; and (4) Strangers. For the purposes of this questionnaire, we define each of these relationships as follows:

> YOUR FAMILY: By "family," we mean only the core, nuclear family that was present during your growing years, such as your mother, father, and any brothers or sisters. Do not include other relatives such as aunts, uncles, grandparents, cousins, etc., as your "family" here unless they actually lived with you while you were growing up.
>
> CLOSE FRIENDS: By "close friends," we mean those individuals whom you consider "close;" i.e., with whom you spend a lot of time and/or have known for a long time. Do not consider people who are "just" acquaintances, colleagues, or others whom you would not consider as your close friends. Also, do not consider intimate partners (e.g., boyfriend, girlfriend) here, either.
>
> COLLEAGUES/acquaintances: By "colleagues/acquaintances," we mean those people with whom you interact on a regular basis, but with whom you may not be particularly close (for example, people at work, school, or a social group). Do not consider close friends on the one hand, or total strangers on the other.
>
> STRANGERS: By "strangers,"" we mean those people with whom you do not interact on a regular basis, and whom you do not know (i.e., total strangers such as people in the subway, on the street, at public events, etc.). Do not consider friends, acquaintances, or family.

You can refer to this list as many times as you want when completing your ratings.

We know that your values and behaviors may differ within each of these groups, depending on with whom you are interacting. Try not to be too concerned with specific individuals, but rather, try to respond to what you believe about each of these groups as general categories of social relationships. Also, don’t be concerned at all about how your responses compare to each other. There is no right or wrong, good or bad. Don't worry about whether your responses are consistent. Just tell us how you truly feel about each group on its own merits.

PART I: VALUES

In this section, tell us about the values you have when interacting with people in the four relationship groups. By "values" we mean *your ideas about how a person should try to feel or behave (even if he or she does not always succeed)*. So for each statement below, we are asking how important you think it is for a Pakistani person to act or feel this way with each of the four relationship groups. Keep in mind that you might act or feel differently with people from different groups. Please circle your response.

		Not at all important						Very important
Maintain self-control toward them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Share credit for their accomplishments	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Share blame for their failures	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Respect and honor their traditions and customs	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Be loyal to them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Sacrifice your goals for them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Sacrifice your possessions for them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Respect them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6

Compromise your wishes to act in unison with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Maintain harmonious relationships with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Nurture or help them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Maintain a stable environment (e.g., maintain the status quo) with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Exhibit “proper” manners and etiquette, regardless of how you really feel, toward them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Be like or similar to them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Accept awards, benefits, or recognition based only on age or position rather than merit from them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Cooperate with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6

Communicate verbally with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
"Save face" for them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Follow norms established by them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6

PART II: BEHAVIORS

In this section, tell us about *your actual behaviors when interacting with people in the four relationship groups*. That is, we want to know how often you actually engage in each of the following when interacting with people in these relationship groups. Use the following rating scale to tell us how often you engage in each type of behavior. Please click on the appropriate number for each group.

		Never						All the Time
Maintain self-control toward them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Share credit for their accomplishments	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Share blame for their failures	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Respect and honor their traditions and customs	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Be loyal to them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6

	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Sacrifice your goals for them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Sacrifice your possessions for them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Respect them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Compromise your wishes to act in unison with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Maintain harmonious relationships with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Nurture or help them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Maintain a stable environment (e.g., maintain the status quo) with them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Exhibit “proper” manners and etiquette, regardless of how you really feel, toward them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Be like or similar to them	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
	Stranger	0	1	2	3	4	5	6
Accept awards, benefits, or recognition based only	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6

on age or position rather than merit from them	Stranger	0	1	2	3	4	5	6
	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
Cooperate with them	Stranger	0	1	2	3	4	5	6
	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
Communicate verbally with them	Stranger	0	1	2	3	4	5	6
	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
"Save face" for them	Stranger	0	1	2	3	4	5	6
	Family	0	1	2	3	4	5	6
	Friends	0	1	2	3	4	5	6
	Colleagues	0	1	2	3	4	5	6
Follow norms established by them	Stranger	0	1	2	3	4	5	6

Emotion Stories

Once again, thank you for your participation. In this last survey we are asking you to write about situations in which you felt these emotions: sad, happy, ashamed, angry, and pride. Please write your description in the place provided. In writing your descriptions, try and think of situations that are typical of your behaviors and your values. Please describe a situation in which you were interacting with only one other person. Be sure to indicate why the situation you describe made you feel the emotion that you are writing about. Also provide information about the other character in the situation; including their relationship to you and their gender. Please provide as much detail as possible about the background and the events that led you to experience the emotion.

SADNESS

_____
_____
_____
_____
_____

In the situation you described, how likely are you to show your emotion, as you feel it, to the other person?

0	1	2	3	4	5	6

Not at all			Somewhat likely			Extremely likely

In the situation you described, in what manner, if at all, did you express your sadness to the other person?

- Show more sadness than you feel
- Express your sadness just as you feel it
- Show less sadness than you actually feel
- Show your sadness but with another expression
- Hide your feelings of sadness by showing nothing
- Hide your feelings of sadness by showing something else
- Other: none of the above _____

ANGER

_____
_____
_____
_____
_____

In the situation you described, how likely are you to show your emotion, as you feel it, to the other person?

0	1	2	3	4	5	6
Not at all			Somewhat likely			Extremely likely

In the situation you described, in what manner, if at all, did you express your shame to the other person?

- Show more anger than you feel
- Express your anger just as you feel it
- Show less anger than you actually feel
- Show your anger but with another expression
- Hide your feelings of anger by showing nothing
- Hide your feelings of anger by showing something else
- Other: none of the above _____

As a reminder, in writing your descriptions, try and think of situations that are typical of your behaviors and your values. Please describe a situation in which you were interacting with only one other person. Be sure to indicate why the situation you describe made you feel the emotion that you are writing about. Also provide information about the other character in the situation; including their relationship to you and their gender. Please provide as much detail as possible about the background and the events that led you to experience the emotion.

HAPPINESS

_____
_____
_____
_____
_____

In the situation you described, how likely are you to show your emotion, as you feel it, to the other person?

0	1	2	3	4	5	6
Not at all			Somewhat likely			Extremely likely

In the situation you described, in what manner, if at all, did you express your happiness to the other person?

- Show more happiness than you feel
- Express your happiness just as you feel it
- Show less happiness than you actually feel
- Show your happiness but with another expression
- Hide your feelings of happiness by showing nothing
- Hide your feelings of happiness by showing something else
- Other: none of the above _____

PRIDE

_____
_____
_____
_____
_____

In the situation you described, how likely are you to show your emotion, as you feel it, to the other person?

0	1	2	3	4	5	6
Not at all			Somewhat likely			Extremely likely

In the situation you described, in what manner, if at all, did you express your pride to the other person?

- o Show more pride than you feel
- o Express your pride just as you feel it
- o Show less pride than you actually feel
- o Show your pride but with another expression
- o Hide your feelings of pride by showing nothing
- o Hide your feelings of pride by showing something else
- o Other: none of the above _____

SHAME

_____
_____
_____
_____
_____

In the situation you described, how likely are you to show your emotion, as you feel it, to the other person?

0	1	2	3	4	5	6
Not at all			Somewhat likely			Extremely likely

In the situation you described, in what manner, if at all, did you express your shame to the other person?

- o Show more shame than you feel
- o Express your shame just as you feel it
- o Show less shame than you actually feel
- o Show your shame but with another expression
- o Hide your feelings of shame by showing nothing
- o Hide your feelings of shame by showing something else
- o Other: none of the above _____

Appendix D.

ICIAI Subscales and Item Number

Social Harmony

4 - Respect and honor their traditions and customs

5 - Be loyal to them

8 - Respect them

9 - Compromise your wishes to act in unison with them

10 - Maintain harmonious relationships with them

11 - Nurture or help them

12 - Maintain a stable environment (e.g., maintain the status quo) with them

16 - Cooperate with them

17 - Communicate verbally with them (reverse code first)

Social Identification

14 - Be like or similar to them

15 - Accept awards, benefits, or recognition based only on age or position rather than merit from them

18 - Save “face” for them

19 - Follow norms established by them

Self-Control

1 - Maintain self-control toward them

13 - Exhibit “proper” manners and etiquette, regardless of how you really feel, toward them

Social Sharing of Recognition

2 - Share credit for their accomplishments

3 - Share blame for their failures

6 - Sacrifice your goals for them

7 - Sacrifice your possessions for them

Appendix E.

Story Coding

With the end goal of categorizing stories as being either more representative of collectivist values or individualist values, an *a priori* coding methodology was proposed following the deductive qualitative content analysis method (Cho and Lee, 2014). However, multiple revisions became necessary to the coding procedure as reliability between raters was problematic. The sequence of methodologies is detailed below

Story Coding Method 1

In the original proposed methodology stories were to be categorized as being either more representative of collectivist values or individualist values. Thus an *a priori* coding document was constructed based on prior research that defined the values associated with the two cultural constructs (see Appendix F). Instructions to raters were simply to review the list of value codes and list the individual value codes that were depicted in each of the stories that they reviewed (e.g., value 29 = shame due to individual failure; value 37 = self-sufficiency).

Training and reliability round 1. Initial raters: Mehreen (Canadian-Pakistani coder), Farrah (American-Pakistani), Nikki (European-American), Lindsay (European-American) and Serah (American- Pakistani).

Refinements to the *a priori* document were made during the initial stages of training. The principal investigator reviewed the coding document with Mehreen (the Canadian-Pakistani rater) during which clarifications and further differentiated the operational definitions of values was done. Once this process was completed, the remaining coders (Nikki, Lindsay and Farah) joined in the coding of the first few stories. During this initial phase of training, some value codes were consolidated and clarification

and examples were added based on group discussion. In doing so the final list of values was constructed (see Appendix G).

During these initial training sessions were conducted with all 5 raters together (save Mehreen who was on the phone). In these sessions the coding document and differences between the codes was discussed at length in addition to coding a couple of stories were emotion together. Once a comfort level was reached, raters were asked to independently code 5 stories per emotion and meet weekly, as a group, to discuss. These meeting became the forum to discuss each rater's coding as well as reach a consensus on the codes used. With the loss of one rater the remaining 4 raters coded 50 (10 respondents x 5 emotions) stories to be used for the reliability calculations. Raters were asked to read a story and list all represented values. Kappas were calculated, between the principal investigator and each of the three other raters, for each value endorsed across all respondents for each emotion. Results indicated low levels of inter-rater reliability for individual values (See Appendix G).

Since the hypotheses pertain to overall categorization of the story as either individualistic or collectivist, kappas on the overall story categorization were subsequently examined. This overall categorization of the story was calculated by examining the ratio of individualistic (IND) and collectivistic (COL) codes. Thus a story coded with two IND codes and four COL codes has a ratio .67 (4/6) COL codes and will be categorized as a story depicting a majority of COL values. If the calculated ratio was 50% the story is given a *not-categorized* (N) classification. Kappas on this overarching classification were better than the more granular coding however they still fell short of the required minimum kappa to move forward. See Table E.1 for more information.

Table E.1
Kappa Calculations by Raters

Anger

	Serah/Lindsay			Serah/Nikki			Serah/Mehreen		
	I	C	N	I	C	N	I	C	N
I	1	1	0	3	1	0	4	0	0
C	1	3	1	0	4	1	3	1	1
N	1	1	1	0	1	0	0	1	0

With N Categorization	0.21	0.47	0.18
Without N Categorization	-0.2	0.75	0.25

Happy

	Serah/Lindsay			Serah/Nikki			Serah/Mehreen		
	I	C	N	I	C	N	I	C	N
I	5	0	0	5	0	0	5	0	0
C	0	4	0	0	3	1	0	4	0
N	0	1	0	0	1	0	0	1	0

With N Categorization	0.82	0.66	0.82
Without N Categorization	1	1	1

Pride

	Serah/Lindsay			Serah/Nikki			Serah/Mehreen		
	I	C	N	I	C	N	I	C	N
I	3	0	0	3	0	0	3	0	0
C	0	6	0	0	5	1	0	4	2
N	0	1	0	1	0	0	0	1	0

With N Categorization	0.8	0.65	0.49
Without N Categorization	1	1	1

Shame

	Serah/Lindsay			Serah/Nikki			Serah/Mehreen		
	I	C	N	I	C	N	I	C	N
I	7	0	1	8	0	0	4	2	1
C	0	1	0	1	0	0	0	0	0
N	0	0	1	0	0	1	1	1	1

With N Categorization	0.76	0.63	0.15
Without N Categorization	1	0	0

Sadness

Serah/Lindsay			Serah/Nikki			Serah/Mehreen		
I	C	N	I	C	N	I	C	N

I	0	1	0	I	0	1	0	I	1	0	0
C	0	7	0	C	0	7	0	C	1	5	1
N	0	2	0	N	0	2	0	N	0	2	0
With N Categorization			0				0				0.15
Without N Categorization			0				0				0.59

Training and reliability round 2. To account for inter-rater reliability a second training session was conducted. Values were reviewed and changes were made as needed. A key part of retraining was to constantly ask "What in this story is eliciting the emotion" as not to be distracted by extraneous information. At this time the remaining American-Pakistani rater left the team. The rating team now consisted of the principal investigator, and the two European- American raters (Lindsay and Nikki). A decision was also made to move to calculation of kappas on the overall classification of the stories (and no longer looking at agreement on individual values). This retraining proved to yield higher kappas. However, the required reliability cutoffs were still only achieved on 2 of the 5 emotions.

Story Coding Method 2

With consultation from Drs. Sanchez and Camras a move to thematic consensus coding (Bruan & Clarke, n.d; Marks & Yardley, 2004) was adapted as a remedy. With significant variability of depth and breadth of information in each new set of stories it was determined that this was the best method to embrace and would still yield information needed to address the proposed hypotheses.

Thus, coding proceeded in the following manner. Raters were assigned a subset of stories on a weekly basis. They were asked to code all 5 emotion eliciting stories by a respondent before moving to the stories written by the next respondent. This was done as

it was noted that respondents, at times, would talk about different aspects of one situation that elicited multiple emotional responses and at times that additional information was helpful in coding. Once again, weekly meetings were held to discuss the resulting codes. The rater's independent codes were retained and as well the resulting consensus coding. Kappas were calculated for each subset (the number of stories in a subset range from 7 – 15) in addition to calculating kappas for an aggregate of all the subsets (N = 44). There was once again variability in the kappas by emotion for each subset and an acceptable level of agreement was not attained across all raters and emotions consistently. See Table E.2 for Kappas.

Table E.2 Coding for Method 2: Overall Kappas:

Anger

	Serah/Lindsay			Serah/Nikki			Serah/final coding based on consensus		
	I	C	N	I	C	N	I	C	N
I	15	2	1	14	1	3	12	1	2
C	4	17	1	4	17	1	1	12	3
N	1	0	2	0	0	3	0	0	2
With N Categorization			0.63			0.65			0.66
Without N Categorization			0.68			0.72			0.85

Happy

	Serah/Lindsay			Serah/Nikki			Serah/final coding based on consensus		
	I	C	N	I	C	N	I	C	N
I	15	0	1	16	0	0	11	0	0
C	2	22	0	1	21	2	0	18	1
N	1	2	0	0	2	1	1	2	0
With N Categorization			0.74			0.79			0.77
Without N Categorization			0.89			0.95			1

Pride

	Serah/Lindsay			Serah/Nikki			Serah/final coding based on consensus		
	I	C	N	I	C	N	I	C	N
I	22	1	1	20	2	2	21	0	1
C	0	10	3	0	10	2	0	7	0
N	3	1	1	1	1	4	0	1	2
With N Categorization			0.62			0.68			0.87
Without N Categorization			0.93			0.86			1

Sad		Serah/Lindsay				Serah/Nikki				Serah/final coding based on consensus		
		I	C	N		I	C	N		I	C	N
	I	1	1	3	I	2	2	1	I	3	0	2
	C	0	33	3	C	1	35	0	C	0	27	0
	N	0	1	2	N	0	1	2	N	0	2	0
With N Categorization				0.46				0.6				0.62
Without N Categorization				0.65				0.53				1

Shame		Serah/Lindsay				Serah/Nikki				Serah/final coding based on consensus		
		I	C	N		I	C	N		I	C	N
	I	15	3	5	I	18	1	3	I	14	0	1
	C	0	10	2	C	3	6	1	C	0	10	0
	N	2	2	1	N	2	2	3	N	2	0	3
With N Categorization				0.43				0.47				0.83
Without N Categorization				0.78				0.65				1

This table presents kappa calculations for stories coded. The Serah/Lindsay column and Serah/Nikki column contain data for the 10 reliability stories, subset 1, 2, & 3 while the Serah/Final coding column represent an aggregated Kappa score for stories in subset 1,2,& 3 only.

Story Coding Method 3

After further discussions with committee chair and questions about the quality of coders, a decision was made to pursue thematic analysis with consensus coding between raters (the primary investigator and committee chair). Reliability was attained on a subset of stories across all emotions. Once again, at this time stories were coded as either representing IND or COL values and stories that could not be coded were categorized as N. With reliability attained (See Table E.3), the principal investigator continued to code the remaining stories. Checks were complete on subsets of stories to protect against drift and consistency. Additionally, if there was ambiguity or question about a given story those were flagged for further review by the committee chair and principal investigator.

Table E. 3 Coding Method 3: Kappa Calculations

	Reliability stories	Combined (subset 4(drift check) & reliability stories (N = 24)

Serah/Camras

Sad	I	C	N
I	0	0	0
C	0	9	0
N	0	0	1
			1

Serah/Camras

	I	C	N
I	1	0	0
C	0	21	0
N	0	0	2
			1

Serah/Camras

Happy	I	C	N
I	5	0	0
C	0	5	0
N	0	0	0
			1

Serah/Camras

	I	C	N
I	10	0	0
C	0	14	0
N	0	0	0
			1

Serah/Camras

Anger	I	C	N
I	2	0	0
C	1	5	1
N	0	0	1
			0.65

Serah/Camras

	I	C	N
I	7	0	0
C	1	12	2
N	0	0	2
			0.78

Serah/Camras

Pride	I	C	N
I	3	0	0
C	0	7	0
N	0	0	0
			1

Serah/Camras

	I	C	N
I	8	0	0
C	0	15	0
N	0	0	0
			1

Serah/Camras

Shame	I	C	N
I	6	0	0
C	1	2	0
N	0	0	0
			0.73

Serah/Camras

	I	C	N
I	9	0	0
C	1	10	0
N	0	1	1
			0.84

Appendix F.

Story Codes and Value Descriptions

Values	Descriptions
Interdependence	A relationship of mutual dependence characterized by mutual sensitivity and mutual vulnerability on the part of all the parties involved. " I like to live close to my good friends" " I can count on my relatives for help" (Trandis et al., 1993)
Fulfill obligations to in-group	An ingroup is a social group towards which an individual feels loyalty and respect, usually due to membership in the group.. Commonly encountered ingroups include family members, people of the same race, culture or religion, and so on.
Rely on group	individual relies on group for recognition or completing certain tasks, can be applied to in-group and out group. The story represents a certain dependence on the group whether it be emotional or physical.
Adherence to traditional values	Following values that have been passed down from generation to generation.
Maintain harmonious relationships with in-group members	Members of the group avoid conflict and work towards strengthening relationships.
Maintain traditional practices	Preserving and upholding customs by passing them down from generation to generation.
Maintain a stable environment (e.g., maintain the status quo) with in-group members	Members of a group maintain normalcy by following the same practices and traditions.
Cooperate with in-group members	Individuals within a group work together in order to reach a common goal.
Emphasis on developing and maintaining relationships	Interactions and the formation of bonds between people is important and encouraged.
Being a part of the in-group	Specific individuals identify with and relate to others who are similar in some or many ways to themselves and they therefore are united by these similarities.
Work for betterment of in-group	Instead of focusing on individual successes members of an in-group work towards attaining well-being and success for the entire group.
Work toward in-group goals	Everyone within a group focuses efforts toward reaching the same goals.
Avoid conflict with in-group	Individuals avoid disagreement and quarrels within their group to maintain harmony and order.

Sacrifice own wishes and desires for the in-group	Individual puts aside their personal wants in order to be in accordance with the majority of the group and avoid inconsistency.
Share material and non-material things	i.e. sharing material possessions such as loaning money to friends, and non-material wealth such as knowledge or information.
Competition between groups	Occurs when groups are vying for the same goal which results in a rivalry or struggle between them.
Attainment of personal goals	An individual works toward and achieves reaching their goals that they have set for themselves.
Group achievement	Individuals within a group work together to reach common goals that will be beneficial to the entire group.
Fulfill roles within group	Members within a group take on certain roles in order to maintain organization and normalcy within the group.
Group or hierarchical decision-making	Decision are made based upon the majority or leader of the group.
Shame/guilt due to failing group	shame or guilt felt in response to not meeting in-group expectations. (I noticed the codes are only pertaining feelings of guilt and shame when failing the group or self…the example you provided had a sense of frustration….can this code be altered?
Living with kin (family)	Living with, interacting with and relying on people who one is related to.
Take care of own	One is protective of people and things that they deem as their own.
Elders transmit knowledge (often oral)	Traditions, stories, facts and the like are passed down from older generations to younger generations through word of mouth and are therefore preserved.
Objects valued for social uses	Certain objects are valued because they are the reason people come together and are responsible for tying people together.
Independence	"I would rather struggle through a personal problem by myself than discuss it with my friends" and "one should live one's life independently of others, as much as possible" (Trandis et al., 1993).
Strong individual rights	Freedoms that people are guaranteed and entitled to.
Self - determination and individual choice	Making decisions based on an individual's own wants and needs.

Separation from religion and community	Avoidance of engaging in religious practices and interacting with groups people.
Pursue individual goals/Attainment of personal goals	Drive/Ambition to pursue or attain goals set out for the individual by the individual.
Ok with in-group disagreement	Differences in thoughts and opinions of members of a group is acceptable and adds to the diversity of the group.
Perusal of individual wishes and desires	Individual wants are considered and taken into account.
Shame due to individual failure	Humiliation or disappointment in one's self because of a failure by the individual.
Competition between individuals	Individuals vying for the same goal come into conflict in order to attain it.
Individuals seek knowledge (often textual)	One has a desire to learn, explore and be curious about new things.
self-determination	Drive that comes from within an individual in order to achieve and reach goals.
self-advocacy	an individual's ability to effectively communicate, convey, negotiate or assert his or her own interests, desires, needs, and rights. It involves making informed decisions and taking responsibility for those decisions (VanReusen et al., 1994).
self-competence	An individual's perceptions of how much they know about themselves and the world.
Self-direction	An individual guides themselves on a specific task or on a path through life.
self-efficacy	How effective an individual is based on their capabilities and performance.
self-regulation	Rules and guidelines, one uses to direct their behavior and decisions.
self-reliance	" I would rather struggle through a personal problem by myself than discuss it with my friends" (Trandis et al., 1993).
self-responsibility	An individual is accountable for their own well-being.
self-sufficiency	An individual provides for and takes care of themselves without help from others.
Seek help if needed	One finds assistance if they have a problem they are unable to solve on their own from sources outside of themselves.
Independent living	An individual lives without others and therefore relies solely on themselves in order to live and survive.

Individual achievement	Attainment of goals is sought for the purpose f leading to success for the individual.
Subjective interpretation of events	Events can be understood in different ways dependent on the individual that is analyzing the events and the experiences that they have had.
Living apart from immediate family members	One does not live with people to whom they are related which therefore limits how much they can rely on them.
True to own values and beliefs	Living one's life in accordance with one's own moral compass which is guided by values, principles and ideas that they think are important.
Continuously improve practices (progress)	Old and updated practices are replaced and updated through the employment of more effective strategies and methods.
Strong individual property rights	Freedoms that guarantee that individuals are allowed to own property.
Objects valued for technological uses	Objects that are significant because they employ technology that results in innovation, advancement and overall benefits to society.

Appendix G.

Story Codes and Value Descriptions: Revised

Value #	Value	Description
2	Interdependence	A relationship of mutual dependence characterized by mutual sensitivity and mutual vulnerability on the part of all the parties involved. " I like to live close to my good friends" "I can count on my relatives for help" (Trandis et al., 1993). " people are not separate units, but rather are part and parcel of a larger group (i.e., extended family, village, or tribe). In other words, people are interdependent." A person's identity in this type of society tends to be based on one's roles and experiences within the group context. For example, people in traditional Pacific Island cultures have been described as developing "shared identities" as the result of "sharing food, water, land, spirits, knowledge, work, and social activities" (Linnekin & Poyer, 1990, p. 8).
3	Being a part of the in-group	Specific individuals identify with and relate to others who are similar in some or many ways to themselves and they therefore are united by these similarities. i.e. being a part of a club, family, community.
4	Fulfill obligations to in-group	An in-group is a social group towards which an individual feels loyalty and respect, usually due to membership in the group. Commonly encountered in-groups include family members, people of the same race, culture or religion, and so on. Where there are conflicting commitments, family and neighborhood (community) demands transcends school and work requirements _. I.e. obligated to offer extensive social, economic and personal support to group members.
5	Rely on group	individual relies on group for recognition or completing certain tasks, can be applied to in-group and out group. The story represents a certain dependence on the group whether it be emotional or physical.

6	Adherence to traditional values and customs	Following the values and customs that are passed through ones in-group (culture/family/race/etc). Traditionally, these values are passed from generation to generation and are, overall, maintained/held in high regard throughout the majority of the group. Example of a custom could be maintaining the tradition of giving gifts on Christmas, or the practice of arranged marriages. While an example of a value is respect for elders, etc.
7 (7,8 & 12 combined)	developing and Maintaining harmonious cooperative relationships with in-group members	7) Continuing to form strong bonds between in-group members and work to maintain a strong working relationship with the people in one's in-group. To avoid conflict with other in-group members. This could mean going along with something that you do not personally believe in order to have a good relationship with the group. 8)Individuals within a group work together in order to reach a common goal. 12)Avoiding situations/discussions/activities/piece of knowledge that, were the group to find out, would result in unfavorable feelings or actions. This can be going along with something, not doing something, or not saying something because it could potentially lead to conflict with the group. " value placed on smooth interpersonal communication, especially in public. May answer yes to be compliant rather than express personal feelings.
9	Work for betterment of in-group	Working, either alone or with others, for something that will be beneficial for the members of one's own group as a whole. This may or may not be what is best for the individual alone, but will benefit the group that the individual belongs to. Since it does benefit the individuals own group, it would not be uncommon for it to benefit the individual in the long run.
10	Work toward in-group goals	Working, either alone or with others, toward attaining a goal set by the group. These could be the goals of the entire groups, or only a part of the group. Overall

		though, they are the goals from one's own group, not the individual.
11	Group achievement	Achievement/group success that is tied to goals and desires that are determined by the group. Also pertains to the feeling that an ingroup member's success is also that of the group (as long as that success doesn't violate the harmony of the ingroup).
13	Sacrifice own wishes and desires for the in-group	Giving up one's own goals/wishes/desires/wants that may have conflicted with the group, choosing instead to be in sync with the group.
14	Share material and non-material things	i.e. sharing material possessions such as loaning money to friends, and non-material wealth such as knowledge or information. This includes emotions or emotion experience.
15	Competition between groups	A competition/rivalry/ controversy between groups (whether at the level of the family, business, or nation). Members of successful groups take pride in what the group has accomplished."
16 (16 & 40 combined)	Attainment of personal goals/individual achievement	Reaching one's own personal goals. These are likely set by the individual, though they could be influenced by the group. These goals could also have nothing to do with the group. The importance though is that they are the goals that a particular individual has for themselves.
17	Fulfill roles within group	To achieve/accomplish/complete/take on the particular roles that an individual's group places upon them. This could be a family role, career role, social role, etc.
18	Group or hierarchical decision-making	Making decisions as a group or based on a status in hierarchy (ranking/seniority chain, age, status). " Family elders may be highly respected, and they often have roles of authority with responsibility to make sure family members do what is best for the family rather than what is best for themselves as individuals. Elders may have final say about how far their children go in school, who they marry, or where they work."

19	Shame/guilt due to failing group	shame or guilt felt in response to not meeting in-group expectations.
20	Living with kin (family)	Living with one's own family. This could be anything from living with a sibling, to living with one's immediate family, to living with extended family (grandma, aunt, cousin, etc).
21	Protecting/defending ones own	Taking care of members within in-group or protecting the group as a whole. Making defending the interests of the group a priority. Does not have to do with agreement, but taking care of your own group regardless. For example, law enforcement officials will protect and defend their own. "In some cultures, great importance is placed on maintaining the family reputation by not shaming it. This perspective can delay or prevent getting help if conditions such as mental illness or disabilities are viewed as sources of shame. Furthermore, family members may desire or feel obligated to care for relatives in need, so accepting help from others may be viewed as evading family responsibilities (Boone, 1992).
22	Elders transmit knowledge (often oral)	Traditions, stories, facts and the like are passed down from older generations to younger generations through word of mouth and are therefore preserved. " people of high social status may be seen as holding important cultural and technological knowledge. This knowledge may have traditionally been memorized (i.e., rather than recorded in writing) and transmitted orally. Much of this knowledge may be reserved only for people who have passed ceremonial milestones or belong to a restricted group, so that they can effectively fill their social roles. It may be considered disrespectful for children to express their opinions to or ask many questions of their elders. Instead they may be expected to absorb and then reflect back the knowledge provided to them by their elders, who determine when youngsters are ready to learn."

23	Objects valued for social uses	Certain objects are valued because they are the reason people come together and are responsible for tying people together.
24	Independence	"I would rather struggle through a personal problem by myself than discuss it with my friends" and "one should live one's life independently of others, as much as possible" (Trandis et al., 1994) " there are sharp boundaries between people, with each person being a complete unit. In other words, people are considered to be independent. They are generally also thought to have rights and responsibilities that are more or less the same. A person's identity (i.e., the sense of self) tends to be based mainly on one's personal experiences—accomplishments, challenges, career, relationships with other people, etc."
25 (45 & 25)	Strong individual rights/strong individual property rights.	A strong emphasis on the rights of the individual. These rights are for the individual person, not a group as a whole. They allow a person certain freedoms, rights, and standards that they are expected to be able to live with/by.
26 (39 & 26)	Self - determination and individual choice/ pursue individual goals.	26) Making decisions based on an individual's own wants and needs. Not being required to go through someone else for approval when making decisions for yourself. (i.e., in contrast to group decision making) 39) Drive/Ambition to pursue or attain goals set out for the individual by the individual.
27	Separation from religion and community	Avoidance of engaging in religious and social community.
28	Ok with in-group disagreement	Disagreements within in-group members is accepted.
29	Shame due to individual failure	Shame/guilt resulting from not being able to meet one's own expectations, and or failure to accomplish a personal goal.
30	Competition between individuals	A competition/rivalry/ controversy between individuals. "people can show that they have valued characteristics–such as mastery of certain skills or being able to perform under pressure–by competing with and doing better than others. " "society

		encourage doing better than others as proof of mastery; games are based on having a winner and loser, winners in a variety of activities are regularly rewarded" (Luft, 2001, p134).
31	Individuals seek knowledge (often textual)	Searching for information on your own. Often from books, newspapers, magazines, internet, other written sources. Personal desire to gain wisdom through written material. In contrast to looking at elders for wisdom. i.e. going to a book to gain knowledge about the partition of India/Pakistan instead of talking to parents. In contrast to seeking knowledge from elders.
32	self-advocacy	an individual's ability to effectively communicate, convey, negotiate or assert his or her own interests, desires, needs, and rights. It involves making informed decisions and taking responsibility for those decisions. (VanReusen et al., 1994).
33	self-competence	An individual's perceptions of their personal strengths and weakness. An individuals belief in how they are able to do something. Believing that you can reach a particular goal or do a certain task.
34	self-regulation	individual is able to maintain themselves and monitor/alter/maintain their behavior.
36 (36 & 37 combined)	self-responsibility/self - sufficiency	Being aware and taking consequence for ones actions. Taking care of oneself. 37) Taking responsibility for ones own life and being stable in that life. This means having financial stability, emotional stability, responsibility for tasks involved with living without needed help from others. The ability to fulfill ones responsibilities in life without the need to rely on others.
38	Seek help as last resort	Asking or looking for help when needed. "Nuclear family units qith little reliance on extended family. Use of professional assistance and services when issues cannot be resolved within the nuclear family unit (luft, 2001, p.150)

41	Subjective interpretation of events	Events are understood based on ones own interpretation/evaluations of it. Does not look outside of ones self (i.e., others within the in-group, or societial standard to evaluate an event).
43	True to own values and beliefs	Living one's life in accordance with one's own moral compass which is guided by values, principles and ideas that they think are important. Maybe with or without support of others.
44	Continuously improve practices (progress)	continuously evolving traditions and customs to better meet the needs/accommodate the current needs of the community.
46	Objects valued for technological uses	Objects viewed as being important for their technological use/purpose. Value placed on an object because it is technologically superior (ex: newer model). This is contrast to objects being valued for their social uses.

Appendix H.

Instruction to Raters

When coding respondent stories: Remember to ask yourself - what in this story is causing this person to feel this emotion?

Individualism and Collectivism Defined

Collectivism

Collectivists place an enormous value on maintaining strong bonds within their in-groups or culture. In-groups are defined as comprising people that are concerned for and invested in the individual's well-being. Group members seek to conform to group norms and fulfill its social and cultural obligations (Kim, 1997; Matsumoto et al., 1998; Schimmack, 1996; Stephan et al., 1998). As such, being a team player and working for the betterment of the in-group is considered more important than being an individual. Thus, conformity within in-groups is expected and sanctions for nonconformity exist (Bond & Smith, 1996). Collectivists share material and nonmaterial things with group members, including: possessions, goals, and sharing news – both good and bad (Hui & Triandis, 1986). Personal goals that conflict with the group's goals are more likely to be set aside in order to avoid conflict within the group. To the collectivist, then, the individual cannot be separated from others or the surrounding social context; the focal point, therefore, in an individual's experience is self-in-relation-to-other. Interpretations of events are very much dependent on the impact of a given event on the different relationships that one has within the in-group. In-group relationships themselves are hierarchical, with individual position and rank being

determined by characteristics such as birth order, age and gender. Vertical relationships that are in conflict with horizontal relationships take priority. Membership in these groups may at times be involuntary but are always intimate and enduring (Triandis et al., 1988). In this manner, in-groups have a profound effect on a person's behaviors. Just as collectivists value their closeness to their in-group members, they value distance from out-group members. Collectivists tend to belong to fewer in-groups than do individualists, as the emotional commitment and intimate bond with these groups is much greater.

Code the story as collectivistic when:

- emotion is being felt because collectivist values are being demonstrated - i.e., happiness at spending time with family
- a roommate is not a part of ingroup
- God is a part of the ingroup
- the emotion is being felt because collectivist values are being disrupted
- the respondent and their friend are the recipient of the same emotion stimulus
- the presence of an Individualistic value + a collectivistic value = story representing collectivists
- the presence of an equal number of multiple Individualistic values (e.g., I,C,C,I = N) equals a story that cannot be categorized

For Sadness:

- loss of relationship

Pride:

- at other's accomplishment (e.g., team)
- at being praised by another

Anger:

- Screw up relationship

Shame:

- Someone in the respondent's family acts badly/poorly
- Shame in front of other person for own actions

Individualism

Those from individualistic cultures are found to focus on developing and fulfilling personal goals and desires. It is considered important to be independent and "your own person." To these ends, the pursuit of personal goals trumps the need to avoid conflict with in-group members who may differ in their goals. The attainment of personal dreams and fulfillment of personal needs is considered a priority over maintaining smooth relationships with others. Once again, the individualist focus is on self reliance, independence, separation from religion and community; and the interpretation of events entirely depends on the subjective feelings of the person and the importance of the event to the person. Individualists only share good news and bad news with their immediate family, all the while maintaining a comfortable distance from them. This may also mean that they prefer to live apart from their immediate family members. Similarly, individualists tend to make intimate acquaintances easily with the effects of these groups on their behavior being minimal and specific. Competition is welcomed in order to distinguish oneself from others, and the self is the only source of reality

(Bellah, Madsen, Sullivan, Swindler & Tipton, 1985; Hui & Triandis, 1986; Markus & Kityama, 2001; Matsumoto, 1989; Matsumoto et al., 1998; Schimmack, 1996; Stephan et al., 1998).

Code as Individualistic when:

- emotion is being felt because individualist values are being demonstrated - i.e., happiness at personal accomplishment
- emotion is being felt because individualistic values are being blocked /disrupted - i.e., anger because dad grounded me and i can't go to the party.
- no violation of relationship
- personal achievement
- someone else compliments on personal achievement

Code as "Not categorized:" when not sure or not enough information.

Appendix I.

Story Coding Method I Reliability Matrix

Table I.1
Kappa Matrix for Story Coding Method 1: Anger Values

Value Number and Description		Serah/ Lindsay			Serah/Nikki			Serah/Mehreen	
2		Y	N		Y	N		Y	N
Interdependence	Y	0	1	Y	0	5	Y	0	1
	N	0	9	N	0	5	N	0	9
	Kappa	0			0			0	
3		Y	N		Y	N		Y	N
Being a part of the in-group	Y	0	4	Y	0	3	Y	0	1
	N	0	6	N	0	7	N	0	9
	Kappa	0			0			0	
4		Y	N		Y	N		Y	N
Fulfill obligations to in-group	Y	0	0	Y	1	2	Y	0	0
	N	1	9	N	0	7	N	1	9
	Kappa	0			0.41			0	
5		Y	N						
Rely on group	Y	0	4						
	N	0	6						
	Kappa	0							
7		Y	N		Y	N		Y	N
Developing and maintaining harmonious cooperative relationships with in-group members	Y	2	0	Y	1	1	Y	0	0
	N	1	7	N	2	6	N	3	7
	Kappa	0.74			0.21			0	
9		Y	N		Y	N			
Work for betterment of in-group	Y	0	1	Y	0	1			
	N	0	9	N	0	9			
	Kappa	0			0				

13 Sacrifice own wishes and desires for the in-group

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y		
N		
Kappa		

	Y	N
Y	0	1
N	0	9
Kappa		0

14 Share material and non material things

	Y	N
Y	1	1
N	0	8
Kappa		0.62

	Y	N
Y	0	1
N	1	8
Kappa		-0.11

	Y	N
Y	0	0
N	1	9
Kappa		0

15 Competition between groups

	Y	N
Y	0	2
N	0	8
Kappa		0

	Y	N
Y		
N		
Kappa		

	Y	N
Y		
N		
Kappa		

16 Attainment of personal goals/individual achievement

	Y	N
Y	0	0
N	2	8
Kappa		0

	Y	N
Y	0	0
N	2	2
Kappa		0

	Y	N
Y	0	0
N	2	8
Kappa		0

17 Fulfill roles within group

	Y	N
Y	1	0
N	0	9
Kappa		1

	Y	N
Y	0	0
N	1	9
Kappa		0

	Y	N
Y	0	0
N	1	9
Kappa		0

20 Living with kin (family)

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y		
N		
Kappa		

21 Protecting/defending ones own

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y	0	2
N	0	8
Kappa		0

24 Independence

	Y	N
Y	0	1
N	0	9
Kappa		0

	Y	N
Y	0	0
N	1	9
Kappa		0

	Y	N
Y	1	1
N	0	8
Kappa		0.62

25 Strong individual rights/strong individual property rights.

		Y	N		Y	N		Y	N
	Y	1	2	Y	1	2	Y	1	2
	N	0	7	N	0	7	N	0	7
	Kappa	0.41			0.41			0.41	

26 Self-determination and individual choice/pursue individual goals.

				Y	N			
			Y	0	1			
			N	0	9			
	Kappa				0			

28 Ok with in-group disagreement

		Y	N				Y	N
	Y	0	1			Y	0	5
	N	0	9			N	0	5
	Kappa	0					0	

30 Competition between individuals

		Y	N				
	Y	0	3				
	N	0	7				
	Kappa	0					

33 Self-competence

		Y	N		Y	N		Y	N
	Y	0	0	Y	0	0	Y	0	1
	N	1	9	N	1	9	N	0	9
	Kappa	0			0			0	

34 Self-regulation

		Y	N				Y	N
	Y	0	1				Y	0	1
	N	0	9				N	0	9
	Kappa	0						0	

36 Self-responsibility/self - sufficiency

		Y	N		Y	N		Y	N
	Y	0	0	Y	1	0	Y	1	0
	N	2	8	N	1	8	N	1	8
	Kappa	0			0.62			0.62	

41 Subjective interpretation of events

							Y	N
						Y	0	1
						N	0	9
	Kappa							0

43		Y	N		Y	N			
True to own values and beliefs	Y	0	1	Y	0	1			
	N	0	9	N	0	9			
	Kappa		0			0			

46		Y	N		Y	N		Y	N
Objects valued for technological uses	Y	0	1	Y	0	1	Y	0	1
	N	0	9	N	0	9	N	0	9
	Kappa		0			0			0

Totals	Serah/Lindsay	Serah/Nikki	Serah/Mehreen
Average	0.14	0.09	0.1
Median	0	0	0
Mode	0	0	0

Table I.2

Kappa Matrix for Story Coding Method 1: Sad Values

Value Number and Description	Serah/ Lindsay			Serah/Nikki			Serah/Mehreen		
2		Y	N		Y	N		Y	N
Interdependence	Y	2	3	Y	3	4	Y	1	3
	N	2	2	N	2	1	N	3	3
	Kappa	0.1			-0.2			-0.25	
3		Y	N		Y	N		Y	N
Being a part of the in-group	Y	1	2	Y	1	4	Y	0	5
	N	1	6	N	1	4	N	1	4
	Kappa	0.38			0			-0.2	
4		Y	N		Y	N		Y	N
Fulfill obligations to in-group	Y			Y	0	1	Y		
	N			N	0	9	N		
	Kappa				0				
5		Y	N		Y	N		Y	N
Rely on group	Y	0	1	Y	0	1	Y	1	2
	N	4	5	N	1	8	N	0	7
	Kappa	0.19			-0.11			0.41	
7		Y	N		Y	N		Y	N
developing and Maintaining harmonious cooperative relationships with in-group members	Y	0	0	Y	0	2	Y	1	1
	N	1	9	N	0	8	N	0	8
	Kappa	0			0			0.62	
11		Y	N		Y	N		Y	N
Group achievement	Y	0	0	Y			Y		
	N	1	9	N			N		
	Kappa	0							

13 Sacrifice own wishes and desires for the in-group

	Y	N
Y	0	0
N	2	8

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

14 Share material and non material things

	Y	N
Y	2	2
N	3	3

Kappa 0

	Y	N
Y	1	1
N	2	6

Kappa -0.05

	Y	N
Y	2	2
N	2	4

Kappa 0.17

16 Attainment of personal goals/individual achievement

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y	0	0
N	1	9

Kappa 0

	Y	N
Y	0	0
N	1	9

Kappa 0

17 Fulfill roles within group

	Y	N
Y		
N		

	Y	N
Y		
N		

	Y	N
Y	0	1
N	0	9

Kappa 0

20 Living with kin (family)

	Y	N
Y		
N		

	Y	N
Y		
N		

	Y	N
Y	0	0
N	2	8

Kappa 0

24 Independence

	Y	N
Y	0	0
N	1	9

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

30 Competition between individuals

	Y	N
Y	0	0
N	1	9

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

32		Y	N		Y	N		Y	N
self-advocacy	Y	0	0	Y	0	1	Y		
	N	1	9	N	0	9	N		
	Kappa		0			0			
34		Y	N		Y	N		Y	N
self-regulation	Y	0	0	Y			Y		
	N	1	9	N			N		
	Kappa		0						
38		Y	N		Y	N		Y	N
Seek help as last resort	Y	0	0	Y	0	1	Y		
	N	1	9	N	0	9	N		
	Kappa		0			0			
43		Y	N		Y	N		Y	N
True to own values and beliefs	Y	0	0	Y			Y	0	2
	N	1	9	N			N	0	8
	Kappa		0						0

Totals	Serah/Lindsay	Serah/Nikki	Serah/Mehreen
Average	0	-0	0.08
Median	0	0	0
Mode	0	0	0

Table I..3.

Kappa Matrix for Story Coding Method 1: Shame Values

Value Number and Description	Serah/ Lindsay			Serah/Nikki			Serah/Mehreen		
5		Y	N		Y	N		Y	N
Rely on group	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						
7		Y	N		Y	N		Y	N
developing and Maintaining harmonious cooperative relationships with in-group members	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						
11		Y	N		Y	N		Y	N
Group achievement	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						
14		Y	N		Y	N		Y	N
Share material and non material things	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						
16		Y	N		Y	N		Y	N
Attainment of personal goals/individual achievement	Y	0	1	Y	0	0	Y	0	0
	N	3	6	N	2	8	N	3	7
	Kappa					0			0
17		Y	N		Y	N		Y	N
Fulfill roles within group	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						

19 Shame/guilt due to failing group

	Y	N
Y	1	2
N	0	7

Kappa 0.41

	Y	N
Y	1	1
N	0	8

Kappa 0.62

	Y	N
Y	1	4
N	0	5

Kappa 0.2

24 Independence

	Y	N
Y	0	2
N	0	8

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

26 Self - determination and individual choice/ pursue individual goals.

	Y	N
Y		
N		

Kappa

	Y	N
Y	1	1
N	0	8

kappa 0.62

	Y	N
Y		
N		

29 Shame due to individual failure

	Y	N
Y	4	4
N	0	2

Kappa 0.29

	Y	N
Y	2	4
N	1	3

0.07

	Y	N
Y	3	5
N	1	1

-0.1

32 self-advocacy

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

33 self-competence

	Y	N
Y	0	2
N	0	8

Kappa 0

	Y	N
Y	0	1
N	0	9

0

	Y	N
Y		
N		

34 self-regulation

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y		
N		

	Y	N
Y		
N		

36			Y	N			Y	N			Y	N
self-responsibility/self - sufficiency		Y	0	4		Y	0	3		Y	0	0
		N	1	5		N	1	7		N	1	9
	Kappa							-0.2				0
38			Y	N			Y	N			Y	N
Seek help as last resort		Y	0	1		Y				Y		
		N	0	9		N				N		
	Kappa			0								
41			Y	N			Y	N			Y	N
Subjective interpretation of events		Y				Y				Y	0	1
		N				N				N	0	9
	Kappa											0
44			Y	N			Y	N			Y	N
Continuously improve practices (progress)		Y	0	0		Y	0	0		Y	0	0
		N	1	9		N	1	9		N	1	9
	Kappa			0				0				0

Totals	Serah/Lindsay	Serah/Nikki	Serah/Mehreen
Average	0.02	0.16	0.02
Median	0	0	0
Mode	0	0	0

Table I.4

Value Number and Description		Serah/ Lindsay			Serah/Nikki			Serah/Mehreen		
2			Y	N		Y	N		Y	N
Interdependence	Y		3	1	Y	2	1	Y	0	1
	N		1	5	N	2	5	N	3	6
	Kappa			0.58			0.35			-0.18
3			Y	N		Y	N		Y	N
Being a part of the in-group	Y		0	0	Y	0	0	Y	0	2
	N		2	8	N	1	9	N	0	8
	Kappa			0			0			0
4			Y	N		Y	N		Y	N
Fulfill obligations to in-group	Y		1	0	Y	1	1	Y	0	3
	N		1	8	N	0	8	N	1	7
	Kappa			0.62			0.62			-0.16
5			Y	N		Y	N		Y	N
Rely on group	Y		1	2	Y			Y	0	0
	N		2	5	N			N	4	6
	Kappa			0.05						0
7			Y	N		Y	N		Y	N
developing and Maintaining harmonious cooperative relationships with in-group members	Y		0	0	Y	0	1	Y	0	3
	N		2	8	N	1	8	N	0	7
	Kappa			0			0.11			0
9			Y	N		Y	N		Y	N
Work for betterment of in-group	Y		1	0	Y	1	0	Y	1	1
	N		1	8	N	0	9	N	0	8
	Kappa			0.62			0			0.62
10			Y	N		Y	N		Y	N
Work toward in-group goals	Y		0	0	Y	0	1	Y	1	1
	N		2	8	N	0	9	N	0	8
	Kappa			0			0			0.62

11			Y	N		Y	N		Y	N
Group achievement	Y	Y	1	0	Y	0	0	Y	0	2
	N	N	2	7	N	1	9	N	0	8
	Kappa			0.41			0			0

14			Y	N		Y	N		Y	N
Share material and non material things	Y	Y	2	0	Y	1	1	Y	2	0
	N	N	6	2	N	0	8	N	0	8
	Kappa			0.12			0.62			1

16			Y	N		Y	N		Y	N
Attainment of personal goals/individual achievement	Y	Y	5	0	Y	5	2	Y	5	2
	N	N	3	2	N	0	3	N	0	3
	Kappa			0.4			0.6			0.6

17			Y	N		Y	N		Y	N
Fulfill roles within group	Y	Y	0	0	Y			Y	0	1
	N	N	3	7	N			N	0	9
	Kappa			0						0

18			Y	N		Y	N		Y	N
Group or hierarchical decision-making	Y	Y			Y			Y	0	1
	N	N			N			N	0	9
	Kappa									0

20			Y	N		Y	N		Y	N
Living with kin (family)	Y	Y			Y	0	0	Y		
	N	N			N	1	9	N		
	Kappa						0			

21			Y	N		Y	N		Y	N
Protecting/defending ones own	Y	Y	0	0	Y	0	0	Y	0	1
	N	N	1	9	N	1	9	N	0	9
	Kappa			0			0			0

24			Y	N		Y	N		Y	N
Independence	Y	Y	0	0	Y			Y		
	N	N	1	9	N			N		
	Kappa			0						

26		Y	N		Y	N		Y	N
Self - determination and individual choice/ pursue individual goals.	Y			Y	0	0	Y	0	3
	N			N	1	9	N	0	7
	Kappa					0			0
32		Y	N		Y	N		Y	N
self-advocacy	Y	0	0	Y	0	0	Y		
	N	2	8	N	1	9	N		
	Kappa		0			0			
33		Y	N		Y	N		Y	N
self-competence	Y	1	0	Y	1	0	Y		
	N	2	7	N	0	9	N		
	Kappa		0.41			0			
34		Y	N		Y	N		Y	N
self-regulation	Y			Y	0	1	Y		
	N			N	0	9	N		
	Kappa					0			
43	Y	Y	N		Y	N		Y	N
True to own values and beliefs	N	0	0	Y			Y	0	2
	Kappa	1	9	N			N	0	8
			0						0

Totals	Serah/Lindsay	Serah/Nikki	Serah and Mehreen
Average	0.2006	0.15	0.1667
Median	0.025	0	0
Mode	0	0	0

Table I.5

Kappa Matrix for Story Coding Method 1: Happy Values

Value Number and Description	Serah/ Lindsay			Serah/Nikki			Serah/Mehreen		
2		Y	N		Y	N		Y	N
Interdependence	Y	0	2	Y	1	3	Y	0	1
	N	1	8	N	1	5	N	2	7
	Kappa		-0.1			0.09			0.15
3		Y	N		Y	N		Y	N
Being a part of the in-group	Y	0	4	Y	0	1	Y	0	2
	N	0	6	N	0	9	N	0	8
	Kappa		0			0			0
5		Y	N		Y	N		Y	N
Rely on group	Y	0	1	Y			Y	0	1
	N	0	9	N			N	0	9
	Kappa		0						0
7		Y	N		Y	N		Y	N
developing and Maintaining harmonious cooperative relationships with in-group members	Y	0	2	Y	0	3	Y	0	2
	N	0	8	N	0	7	N	0	8
	Kappa		0			0			0
10		Y	N		Y	N		Y	N
Work toward in-group goals	Y	0	1	Y			Y		
	N	0	9	N			N		
	Kappa		0						
11		y	n				11	y	n
Group achievement	Y	0	3				Y	0	1
	N	0	7				N	0	9
	Kappa		0						0
14		Y	N		Y	N		Y	N
Share material and non material things	Y	3	2	Y	1	2	Y	3	2
	N	0	5	N	2	5	N	0	5
	Kappa		0.6			0.05			0.6
16		Y	N		Y	N		Y	N
Attainment of personal goals/individual achievement	Y	5	1	Y	5	1	Y	5	1
	N	0	4	N	0	4	N	0	4
	Kappa		0.8			0.8			0.8

24

Independence

	Y	N
Y	1	1
N	0	8

Kappa 0.62

	Y	N
Y	1	1
N	0	8

Kappa 0.62

	Y	N
Y	1	0
N	0	9

Kappa 0

25

Strong individual rights/strong individual property rights.

	Y	N
Y		
N		

Kappa

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y		
N		

Kappa

26

Self - determination and individual choice/ pursue individual goals.

	Y	N
Y	0	2
N	0	8

Kappa 0

	Y	N
Y		
N		

Kappa

	Y	N
Y		
N		

Kappa

31

Individuals seek knowledge (often textual)

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y		
N		

Kappa

	Y	N
Y	0	1
N	0	9

Kappa 0

34

self-regulation

	Y	N
Y		
N		

	Y	N
Y		
N		

	Y	N
Y	0	1
N		9

0

36

self-responsibility/self - sufficiency

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
y	0	2
n	0	8

Kappa 0

	Y	N
Y	0	1
N	0	9

Kappa 0

41

Subjective interpretation of events

	Y	N
Y	0	1
N	0	9

Kappa 0

	Y	N
Y	0	0
N	1	9

Kappa 0

	Y	N
Y	0	1
N	1	8

Kappa -0.1