Religion And Identity Formation A Cross National Comparison Of College Students In India & The Usa

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RELIGION AND IDENTITY FORMATION:
A CROSS NATIONAL COMPARISON OF COLLEGE STUDENTS
IN INDIA & THE USA

by

NIYATEE SUKUMARAN
B.A. Sophia College for Women, University of Mumbai, 2007

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Clinical Psychology
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ABSTRACT

With the exception of a few studies (Leak, 2009; Fulton, 1997), psychological research on religion has not been studied from an Eriksonian identity status perspective (Erikson, 1959; Marcia, 1966). Further, Erikson’s (1963) concept of identity appears to be inherently individualistic and may be conceptualized differently in Eastern/Asian cultures (Cloninger, 2008; Paranjpe, 2010).

This study aims to understand the relationship of religiosity and quest to identity development across two cultures: USA and India. A total of 326 undergraduate students (mean age= 19.47, sd= 1.58) participated from two urban colleges in Mumbai, India (n= 159) and one in Orlando, USA (n= 167). All participants completed a battery of measures, including the measure of Religiosity, Quest Scale, Identity Distress Survey, and Ego Identity Process Questionnaire.

Our first hypothesis was confirmed that females would have greater religiosity as compared to males amongst the Indian and USA sample. The second hypothesis was also confirmed that the USA sample would be found more among the achieved and moratorium ego identity statuses as compared to the Indian sample, who would be found more frequently in the foreclosed or diffused ego identity statuses. Although the USA sample was found to be significantly higher in identity exploration, the Indian sample was found to experience greater identity distress. Finally, our third hypothesis was partially confirmed in regard to religiosity, as it was not differentially related to identity variables in both the Indian and USA groups. However, religious quest was differentially related to the identity variables, in that it was related to identity distress in the USA sample, but not in the Indian sample.
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<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES ... vii</td>
</tr>
<tr>
<td>LIST OF TABLES ... ix</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION ........................................... 1</td>
</tr>
<tr>
<td>Adolescent Identity Development .................................. 2</td>
</tr>
<tr>
<td>Empirical Evidence: Religion and Identity Development Amongst Adolescents .......... 5</td>
</tr>
<tr>
<td>Religious Quest and Its Impact on Individual identity ....................... 11</td>
</tr>
<tr>
<td>Culture, Religion and Spirituality ....................................... 14</td>
</tr>
<tr>
<td>Religion within Diverse Cultures ..................................... 15</td>
</tr>
<tr>
<td>Western versus Eastern Comparisons of Psychological and Religious Perspectives ... 17</td>
</tr>
<tr>
<td>Summary ................................................................. 19</td>
</tr>
<tr>
<td>Rationale and Hypotheses ................................................ 20</td>
</tr>
<tr>
<td>CHAPTER TWO: METHODS ................................................ 22</td>
</tr>
<tr>
<td>Participants ........................................................... 22</td>
</tr>
<tr>
<td>Measures ................................................................. 23</td>
</tr>
<tr>
<td>Demographic Information .................................................. 23</td>
</tr>
<tr>
<td>Religiosity .............................................................. 23</td>
</tr>
<tr>
<td>Quest Scale .............................................................. 23</td>
</tr>
<tr>
<td>Identity Distress Survey (IDS) ............................................ 24</td>
</tr>
<tr>
<td>Ego Identity Process Questionnaire (EIPQ) .................................. 25</td>
</tr>
<tr>
<td>Brief Symptom Inventory-18 (BSI-18) ....................................... 26</td>
</tr>
<tr>
<td>Procedure ........................................................................ 27</td>
</tr>
<tr>
<td>CHAPTER THREE: RESULTS ................................................. 28</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: Interaction of religiosity means for Indian and USA samples by gender ..................... 28
Figure 2: Interactions of Gender and Religiosity for India & USA Groups by Identity Status.... 36
LIST OF TABLES

Table 1: Religiosity factors by country......................................................................................... 29
Table 2: Means and Standard Deviations for domains of the IDS. .............................................. 31
Table 3: Frequency distribution for identity status by sample...................................................... 32
Table 4: Means and Standard Deviations for Identity Commitment ............................................ 33
Table 5: Inter-correlations of religiosity, identity, and adjustment variables ............................... 34
Table 6: Means/Standard Deviations for Religiosity and Quest for Identity Status Groups ...... 35
CHAPTER ONE: INTRODUCTION

The past two decades have witnessed a great increase in psychological research on religiousness, development of faith and spirituality (Gebelt & Leak, 2009). Despite this increase in psychological research, none of it has been from an Eriksonian identity status perspective (Erikson, 1959; Marcia, 1966) with the exception of a few studies (Leak, 2009; Fulton, 1997; Mosher & Handal, 1997). Also, it appears that research on religiousness and spirituality has predominantly been conducted in reference to the Western/American culture. A scarcity of research exists in the exploration of these issues within Eastern/Asian cultures. For the purposes of this study, the culture in India and the USA are broadly referred to as Eastern and Western cultures respectively, and we ascribe certain characteristics (e.g., individualistic v. collectivistic) to each. However, we do understand that these cultures are heterogeneous with great intra-cultural variation. As we seek to find and understand cultural differences we recognize that these concepts can be over generalized and it is not our intent to assert that everyone within a culture ascribes to the same cultural values.

Erikson (1968) postulated that in the identity development process, adolescents are confronted with choosing their career path, identifying and committing to their own set of beliefs on essential issues such as religion and political views. On the basis on Erikson’s (1968) premise of adolescent identity development and prevailing cultural diversity, this thesis attempts to understand the relationship between religion and identity development across two cultures: USA and India.

This study examines religiosity (knowledge, belief and practice of religion), religious quest, which is the existential questioning and pursuit of spiritual understanding (Batson & Schoenrade, 1991) and identity variables such as identity exploration and commitment (Marcia,
1967) and identity distress (distress that is associated with unresolved identity issues like occupational goals, political and religious views, and social relationships (Berman, Montgomery, & Kurtines, 2004). Finally, symptoms such as depression, anxiety and somatization, were assessed to differentiate identity distress from psychopathology in our attempt to study the relationship between religiosity, quest and identity development amongst university students in USA and India.

**Adolescent Identity Development**

Erikson (1963) was the founder of the psychosocial theory of personality and identity development. He described the stages of identity development across lifespan, that is, from birth to adulthood. Erikson (1968) delineated the eight progressive stages of psychosocial crisis and development as: (1) trust vs. mistrust, (2) autonomy versus shame and doubt, (3) initiative versus guilt, (4) industry versus inferiority, and (5) identity versus role confusion (6) intimacy versus isolation, (7) generativity versus stagnation and (8) integrity versus despair. This study will focus on the **fifth** stage - identity versus role confusion.

Erikson (1968) proposed identity formation as the most central element in the development of adolescents. He described the process of identity formation as a stage-wise crisis, which involves observation and reflection of one’s existence as well as resolving significant challenges such as forming a personalized sense of self and stabilizing one’s own value and belief systems. He also considered this crisis as a developmental process that facilitates growth, recovery and differentiation. According to him, adolescents who recognize and internalize their specific values, beliefs and roles, develop a stable identity and experience greater psychological adjustment. On the other hand, those who encounter greater difficulty in doing so, experience a crisis, which he termed “identity confusion”. In recent times, researchers
tend to consider the emergence of these challenges and concerns as extending into adulthood (Leak, 2009).

James E. Marcia (1980) construed identity as a “self structure: an internal self – constructed by dynamic organization of drives, abilities, beliefs and individual history” (p.159). To further explain the identity development process, Marcia (1967) operationalized Erikson’s identity formation into two dimensions: *exploration* and *commitment*. He postulated that individuals are categorized in the exploration dimension when they are actively seeking, questioning, striving and evaluating the various aspects of their identity, prior to resolving their direction and purpose in life. Marcia stated that committed individuals are those who have resolved, dedicated and affirmed themselves in relation to their goals, roles, group membership, values and belief systems (political and religious views).

Based on the extent to which adolescents explore and commit to a sense of identity, Marcia (1967) delineated four categories of identity statuses. These four categories are: *diffusion*, *foreclosure*, *moratorium*, and *achievement*. Diffused individuals (low in exploration and commitment) are those who have neither explored nor committed to any specific goals, roles, values or beliefs systems. Individuals in the foreclosed status (low in exploration, but high in commitment) have prematurely committed to their goals, roles, values and beliefs without prior exploration. Most frequently, they do not actively question and explore the different aspects of their identity. In fact, these adolescents tend to uncritically commit to their identities as they are greatly influenced by their parents, friends, society and cultural values. Individuals are considered in the *moratorium* status (high in exploration, low in commitment) as they are actively exploring their identity possibilities with respect to their occupational goals, roles, and their values and beliefs. These individuals experience crisis due to their active exploration.
Finally, those who have surpassed the moratorium status have experienced a decision-making period and ascertained to a sense of individual identity, are said to be in the status of identity achievement (high in exploration and commitment).

As stated above, adolescents are likely to experience some amount of distress over identity-related issues as part of the identity development process, for which Erikson (1963), coined the term identity crisis. He considered this distress to be normal and healthy, particularly during adolescence. However, it is possible that some adolescents might feel overwhelmed as a result of experiencing greater than normal identity-related challenges. For example, a predominant challenge in present times is that society has become more complex, diverse and pluralistic, which has led adolescents to encounter greater alternatives and adjustments related to their lifestyle, belief and value systems, religious, social and sexual behaviors (Berman et al., 2004). It is possible that some adolescents might experience significant distress related to these issues, which might disrupt the normal developmental process and aggravate their behavioral and psycho-social problems (Hernandez, Montgomery & Kurtines, 2006).

Due to the Erikson’s theoretical proposition that adolescents begin exploring, questioning and reasoning the already established values and facts, they are likely to address the predated religious and spiritual information shared by their families and culture. It is predicted that adolescents are likely to work through and personalize their own religious and spiritual beliefs, following which they can commit to their newly resolved perspective. Piaget’s stages of cognitive development also suggest that adolescents have the capacity to consider and understand abstract concepts, which can aid in the exploration of religious and spiritual teachings. Markstrom (1999) described adolescents’ as:
... being able to move beyond childhood impressions of religion to reflection of issues and concepts that are embedded in existential and transcendental realms (Markstrom, 1999, p. 207).

In his writings, Erikson (1968) described the role of religiosity as a “social group history”, which provides social support and a sense of belonging through rituals, faith and affirmative doctrine. It also appears that exploring spiritual and religious domains can be meaningful and vital to the identity formation process among adolescents (Markstrom, 1999). Further, there have been a number of studies (see below) which have reported a moderately positive association between religion and mental health.

**Empirical Evidence: Religion and Identity Development Amongst Adolescents**

Bensen, Donahue, & Erickson (1989) reviewed the literature on religiosity and adolescent development between 1970 and 1986, and found a prevalent and vital influence of religion on adolescence and mental health. Some of the positive effects of religion were identified as group membership, which provides adolescents “a sense of membership and belongingness”, social support, self-esteem, and satisfaction (Loewenthal, 2000).

Although religion appears to be an influential factor in adolescent development, there has been considerable variation in the findings related to its impact on identity development. For example, in their initial longitudinal study, Waterman and Waterman (1971) found a positive developmental shift within freshmen college male students’ occupational identity as compared to a decline in commitment in their ideological and religious identity. Students’ ideological identity was observed to have a shift only from the foreclosed status to the diffused status. Unlike Erikson’s proposition, the results indicated that topics of religion and politics appear to be less important for these students as they did not actively engage in questioning and forming their own
ideological identity. The shift in ideological identity was observed in other longitudinal studies from freshmen to senior year among college students. The results indicated a significant increase in identity achievement for occupational, religious and political beliefs among male college students (Waterman, Geary and Waterman’s, 1974; Waterman & Goldman, 1976). Across both these studies, the area of occupation had a greater increase within the achievement category and subsequent decrease in foreclosed and moratorium categories. It was found that the area of ideological concepts (religious and political beliefs) did not account for an increase in the achievement category as compared to that of occupation. Also, the decrease in the foreclosed and increase in the diffused status of students’ ideological identity suggests that these students are neither exploring nor committing and might be considered as a backward shift from an Erikson’s perspective.

Religion appears to provide adolescents with an ideological institution through which they can explore, discover and affirm their own ideologies. It can be a source of support and can aid in the development of one’s identity. Religion tends to offer an orientation to life and channels individual resources to facilitate the coherence of self. Considering this notion, Markstrom-Adams, Hofstra, and Dougher (1994) examined religious attendance and identity formation among Mormon, Protestant and Catholic adolescents and found no significant gender differences. The results indicated that higher frequency in church attendance was related to commitment statuses such as foreclosure and achievement. They also found that lower frequency church attendance was associated with the non-commitment states of diffusion and moratorium. These authors discussed reasons such as assigned religious identity among adolescents of ethnic-minority groups, religious teachings and the socialization process, as facilitators of greater religious commitment and religiosity (church attendance). Further, Tzuriel (1984) found that
religious adolescents were more committed as compared to secular non-religious adolescents. His results specifically indicated that Western religious adolescent identities were more committed with higher purposefulness in life as compared to adolescents from Asian backgrounds. These differences are possibly due to the manner in which religiousness is perceived in diverse cultures. The Western culture is likely to perceive religion from a cognitive perspective, while the Asian (Easterners) associate with religion at an affective and emotional level.

Religious involvement is associated with various forms of ego strengths such as hope, fidelity, will, love, care and purpose (Markstrom, 1999). Amongst these psycho-social ego strengths, Markstrom (1999) found that the ego strength of care was related to the religious involvement among both African and White American adolescent groups. However, the African American group was found to have other positive benefits such as social support and coping in relation to religious involvement. These results support the idea that ethnic identity is related to religious involvement. Further, the results did not indicate any association between ideological identity and religious involvement. This appears contrary to Erikson’s proposition that religion and religious involvement play a vital role in adolescent identity formation. Their results also indicated no gender differences for the three aspects of religious involvement such as attendance at religious services, bible study and youth groups.

Several investigations about the relationship between religion and psychosocial adjustment have been performed among adults and adolescents. Numerous studies have indicated a direct positive relationship between religion and mental health. In an overview of empirical research, Levin and Chatters (1998) indicated consistent positive influence of religious involvement on mental and physical health. The studies reviewed by them were across diverse
ethnic samples and age groups, used different measures of religiosity and addressed numerous health outcomes. There are plausible negative outcomes of religious involvement such as feelings of alienation upon failing to pursue religious dogma, anger at God, and struggles caused by religious doubts, fears and guilt. Other negative influences of religious and spiritual struggles include potential interpersonal conflicts and rifts within one’s own religious group as well as intrapersonal conflicts when encountered with one’s own religious doubts (Tevari & Alvarez, 2009).

Considering the probable negative impact and distress of religion, Mosher and Handal (1997) assessed the relationship between religion and psychosocial distress among adolescents. In their study, they incorporated a comprehensive measure of religion (the Personal Religious Inventory- PRI), three epidemiological measures of psychological distress and two measures to assess positive adjustment. The results indicated that adolescents tend to become less religious as they grow older. The decrease in religiousness can often be attributed to changes that occur in a context such as shifting to a university lifestyle, moving away from parents and other life changing experiences. Their results illustrated a statistically significant relationship between lack of religion and psychological distress and maladjustment among Caucasian adolescents. Thus, those who reported significantly higher distress and low adjustment obtained lower scores on scales that measured factors such as closeness to one’s God, ritual practice and attendance, following religious and social morals, personal prayer and non-ritual attendance. Further, the results of this study revealed gender differences for symptom severity on the nine subscales of the PRI. Adolescent males who scored low on integration (the perceived impact of religious beliefs on one’s behavior, affect and cognition) had higher symptom severity than those who were medium or high on integration. Also, female adolescents low on the AFT subscale
(measuring belief in life after death) was significantly higher on symptom severity as compared to those who were high on AFT.

The relationship between exploration and commitment of religious beliefs and identity statuses has been minimally explored. As discussed above, religion can have a dual impact. It can either facilitate physical and psychological well-being or it can lead to poor adjustment due to religious doubts, fears and guilt. Hunsberger, Pratt & Pancer (2009) studied identity development, adjustment, and religious doubt (measured by the Religious-Doubt-RD Scale) among Canadian adolescents, with no mention of gender differences. As hypothesized, the moratorium scores were positively associated with doubting and unrelated to commitment while the foreclosed scores were negatively related to doubting. Contrary to their expectations, no significant correlations were obtained for the achieved scores with both religious doubting and commitment. The results also specified that the participants in the diffused category were low in identity commitment and high in religious doubt. Contrary to Marcia’s (1967) description of the diffusion status, the positive link between diffused score and religious doubt suggests that some diffused individuals might have experienced some amount of religious exploration and crises.

Past research had discussed the issue of gender differences and religiousness, in that, women are more likely to be religious than men (Thompson, 1991). In his study, Thompson (1991) found that women are more religious with respect to religious behaviors, religious developmentalism and feeling as compared to men and found no significant gender differences for religious beliefs. It appears that recent research has discussed the role of socialization, femininity and masculinity that influence gender differences for religiousness and spirituality (Simpson, Newman & Fuqua, 2008). The shift in the focus of the relationship between gender and religion can also be discussed from a perspective of a late postmodern industrialized society.
In terms of the relationship between identity distress and gender, Berman, et al. (2004) found only significant gender difference in the area of friendships, wherein males reported more distress than females over this issue. It appears that the relationship between identity distress and gender is yet to be researched extensively.

Leak (2009) assessed the relationship between identity statuses, faith development and religious commitment. His findings obtained no evidence of main and interaction effects of demographic variables (age, gender and religious affiliation) with identity status as the dependent variable. However, gender differences were obtained for extrinsic religiosity and the older participants scored lower on extrinsic religiosity. Consistent with the identity statuses paradigm, Leak’s (2009) study of American college students found the achieved identity status to be positively associated with religious commitment, but not with faith development. The results indicated that those in the moratorium status were higher in faith development than those in the foreclosed and diffused statuses. Thus, it appears that exploration, which is expected to be maximized in the moratorium status, is empirically linked to faith development. Those in the achieved status were not found to be different from those in the foreclosed and diffused status in faith development and negative religiousness (perceptions of extrinsic religiosity, negative attitudes towards people who hold diverse beliefs and religious fundamentalism). This lack of difference in negative religiousness appears to be counterintuitive in that those in the achieved group should have been more likely to have engaged in exploring and committing to their ideologies. The above findings were not consistent with Fulton (1997)’s results, which indicated the highest level of religious commitment within the achieved status. She found that students high in diffusion were less likely to value religious doubts and quest or search for existential questions. In examining identity status, self-esteem, gender and location differences among
Indian adolescents, Basak and Ghosh (2008) found that identity status positively correlated with self esteem in the areas of occupation and religion. The males and females of the rural group and urban male participants in the achieved group had higher self esteem, with the exception of urban females where no relationship was obtained. Further, they obtained that females in the urban and rural samples experienced higher identity crises with respect to occupation, ideological beliefs and interpersonal relationships.

As demonstrated above, the findings delineating the impact of religion and adolescent identity development appear to be conflictual in nature. Research studying gender differences and identity distress appear to be insufficient. It also appears that most of the research on religion and adolescent development has been conducted on White Caucasian and within the Western/American society. Most importantly, it is observed that further empirical research to understand the connections between identity statuses, gender and religious/spiritual exploration and commitment amongst adolescents belonging to diverse backgrounds, is warranted.

**Religious Quest and Its Impact on Individual identity**

Allport and Ross (1967) attempted to understand the motivations for individuals to follow religion, which is referred to as religious orientation. They proposed two religious orientations, namely, *Extrinsic and Intrinsic* religious orientation (Allport and Ross, 1967). Extrinsic oriented individuals are considered to use their religion to serve themselves and receive external motivations such as social contacts and sense of security. Allport and Ross suggest that people who are extrinsically oriented may have an immature understanding of religion. Intrinsically oriented individuals live their religion by having their religious beliefs guide them as well as by having an internal urge to serve the divine (God, as stated by Allport & Ross, 1967). These two religious orientations have been used frequently in the study of religiousness and its impact on
mental health. Research findings have most often suggested a positive mental health status with Intrinsic orientation. There have been mixed findings suggesting that Extrinsic orientation appears to be either negatively associated with mental health or unrelated (Batson, Schoenrade, & Ventis, 1993; Donahue, 1985).

Dissatisfied with Allport and Ross’s ideologies of two religious orientations, Batson and Ventis (1982) proposed a third facet to measure religion, which they referred to as Personal religion. Batson and Schoenrade (1991 a, b) documented measuring this facet in the form of Quest for religion, which would facilitate measuring religious doubts, pursuit of spiritual interest and existential questions. For these theorists, the quest for religion consists of addressing complex existential questions about the meaning of life, death and relationship with others as compared to merely adhering to established beliefs and answers. Batson and Ventis (1982) initially proposed a six-item “Interactional/Quest scale”. This scale tapped individuals’ readiness to face existential questions without reducing its complexity, readiness for self-criticism or perplexity involved in religious doubts and openness to change (Batson & Schoenrade, 1991 a, b). Further, after revising this scale, Batson and Schoenrade (1991 a, b) developed the 12-item Quest scale, which had higher internal consistency as compared to the six-item scale and better measured the intended constructs. The 12-item Quest scale had an internal consistency in the range of 0.75 to 0.82 and positively correlated (in the range of $r = 0.85$ to $r = .90$) with the six-item scale. There appears to be controversial findings about the relationship between Quest orientation and religiosity measures, which has led researchers to be skeptical about the validity of the Quest orientation. The authors of the Quest Scale have reported that individuals with more traditional beliefs score lower on the Quest scale as compared to individuals with less traditional beliefs. Also, there is evidence indicating a correlation between Quest and religious cognitive
complexity, as well as moral reasoning (Sapp & Gladding, 1989). The Quest scale was capable of addressing doubts and existential questions about religion and its impact on individual growth amongst people who do participate and believe in religious behaviors (Maltby & Dav, 1998).

As evidenced in the above discussion, religion does have an impact on adolescent identity development and in some cases it is associated with either psychological adjustment or distress. Based on the theoretical proposition that adolescents are likely to experience identity crises, which might persuade them to explore religious alternatives, this study aims to understand the impact of religiosity and quest on identity development. Further, most of the studies on religious development have been studied in Western/American cultures. Hence, it appears important to understand the relationship between identity and psychological variables across Eastern and Western cultures.

The philosophy and teachings purported by different religions are overwhelmingly intricate. Thus, understanding the manner through which these diverse religious teachings and practices influence individuals is complex. Also, there appears to be a comparable perspective on the distinctive insights of each religious tradition, which impacts people from diverse cultural backgrounds (Paranjpe, 2010). According to Paranjpe (2010), psychology is highly influenced by the Western philosophy. In his recent article, he attempts to find similar and distinctive aspects embedded in Western and Eastern religious philosophies. By providing a comparison between these philosophies, he has contributed an enriched explanation for the influence of religion and traditions impacting people typically across Western and Eastern cultures. The following sections discuss religion, spirituality and their impact on diverse cultures.
**Culture, Religion and Spirituality**

Defining culture and its influence on identity has been one of the greatest challenges for theorists, researchers and clinicians. Amongst the numerous and complex definitions proposed by them, Prochaska & Norcross (2000, p. 424) define culture as “an integrated constellation of human knowledge, belief, and behavior, that is learned and transmitted across generations”. A culture is comprised of numerous variables, such as demographics, socio-economic and educational background. It also encompasses other formal and informal affiliations and ethnographic variables such as nationality, ethnicity, language and religion (Pedersen, 2000). There appears to be numerous and complex definitions of culture. In her article, Nagai (2007) adopted the definition of culture as “constructively created behaviors based on collective beliefs”.

Frequently, two dimensions of culture have been discussed in the literature, namely, individualism and collectivism. Individualism emphasizes autonomy, self initiation and emotional independence. Collectivism promotes group cohesion, integration of individuals within society, adherence to group norms and fulfillment of duties and obligations. Further, when considering these dimensions of culture, there appears to be an inherent distinction based on geographic location and ethnic variation. Based on this distinction, individualism is often associated with the American/Western culture while collectivism appears to be predominant in Eastern/Asian cultures and regions that are much influenced by people of eastern descent. For the convenience of understanding the differences, the culture in India and the USA are broadly referred to as Eastern and Western cultures respectively. We do acknowledge and appreciate the differences that exist within countries and cultures that are also grouped within Eastern and Western cultures.
Comparable to the definition of culture; religion and spirituality are complex concepts that are not easy to define. Considering these complexities, Lindridge (2005) states that “religion” is a part of one’s cultural norms and values within both, individualistic and collectivistic cultures. Zinnbauer and Pargament (2005) define religion as a “system of beliefs in a divine or superhuman power, practices of worship or other rituals directed towards such a power”. They also referred to “religion” as a broad construct, which is not exclusively differentiated from spirituality. Loewenthal (2000) suggests that “spirituality” has commonality across all religious-cultural traditions. Tewari and Alvarez (2009, p. 136) define spirituality as “personal (rather than an institutional) quest for the sacred that may or may not be religious”. It appears that religion and spirituality are dynamic and multi-faceted constructs. It is noted that there is a lack of clear distinction between these two. Considering the interwoven connections between religion and spirituality, it appears difficult to separate them. For the purpose of this study, the author utilizes Hill & Pargament’s (2003) definition of religion and spirituality, as considering both to involve the “search for the sacred”. In this definition, “sacred” refers to “persons and objects of ultimate truth and devotion” (Hill & Pargament, 2003).

**Religion within Diverse Cultures**

Cohen (2009) perceives religion to be an integral part of individuals’ environment, as it involves sharing information and value systems across generations. It appears that religion and spirituality tend to facilitate the process of understanding life, across both Western and Eastern cultures. However, there is a plausible variation in the role and manner through which they influence people from individualistic and collectivistic cultures. In their article, Cohen & Hill (2007) assert that Western (American) religious groups are heavily influenced by individualism, which encourages forming personal goals and control. The Eastern (Indian) religious groups,
whose core is embedded in collectivism, tend to promote group coherence and adherence within religious affiliations. Ano, Mathew, & Fukuyama (2009) discussed the manner in which religious beliefs and practices are intricately interwoven and propagated, especially within traditional Asian cultures. Thus, identification and participation with religious and spiritual groups can further improve individuals’ socialization and adjustment within society, especially for those belonging to Eastern cultures.

Literature has documented a moderately positive relationship between religious identification, commitment and psychological well being. Religion and spirituality provide social and moral norms, meanings and explanations about existential and abstract concepts. They also facilitate a sense of uniformity within society and provide social and group connections. Researchers have repeatedly provided evidence for the social and psychological processes that mediate this relationship. Hathaway & Pargament (1991) discuss “religious attributions” (religious explanations that aid in the search for meaning, controlling and predicting events and enhancing self esteem) and “social identification” (institutional and social connectedness) as mediators between religiousness and psychological well-being. Blaine & Croker (1995) articulately stated that religion affords individuals a medium to preserve and enhance life. It also provides a sense of controllability of events and enhances one’s coping across difficult situations. They also documented a significant relationship between religion and social identification, specifically amongst racial and ethnic minorities. It appears that research validating this relationship had predominantly focused on African American, White and/or Jewish American groups in comparison to cultural groups from the Eastern world (Bergin, 1983; Johnson, Marc Matre and Armbrecht, 1991; Mosher & Handal, 1997; Markstrom, 1999, Cohen & Hill, 2007).
It appears that being “religious” might have different meanings across diverse cultures. Some religious groups might focus more on practicing rituals as compared to pursuing preached beliefs. It is also possible that some religions might emphasize both practicing and believing in their teachings. For example, Bhugra, Bhui, Mallett, & Desai (1999) discussed that “religion is the cornerstone of any identity, since childhood” (p. 245), especially for Asians who are connected with the Indian subcontinent. They assert that children are taught about various religious rituals during childhood, which contribute to the formation of their identity. It must be noted that individuals and society not only interact with different religions/religious groups but are likely to experience variations through which these religions are perceived across Western and Eastern cultures. The following section will provide a brief comparison between religious and psychological perceptions within Western and Eastern cultures.

**Western versus Eastern Comparisons of Psychological and Religious Perspectives**

As discussed above, the role played by diverse religions varies across Western and Eastern cultures. It is noted that there are some similarities and differences in the Eastern philosophy of religion in comparison to the Western approach, which is elaborated in this section. Also, by acknowledging the differences between and within cultures, the culture in India and the USA are broadly referred to as Eastern and Western cultures respectively.

In the Eastern world, theories of self and cognition have been discussed as part of philosophy (Hindu/Advaita and Buddhist philosophy) while in the West, they have been studied as part of psychology. The West pursued psychology as a science to understand the self, human behavior, thoughts and emotions. Unlike Eastern philosophy, Western psychology warrants greater emphasis on empirically studying the self, human behaviors, thoughts and emotions. Several models and quantitative assessments have been developed that are used to measure these
concepts. For example, Erikson’s theory of self and identity development, is measured by Marcia’s (1967) operationalized concepts of identity formation. Erikson’s (1968) theory of identity development had received much affirmation within the Western culture. In his writings, Erikson postulated the psycho-social identity, which is a “sense” of identity that consists of the diverse roles taken upon by individuals within society (Paranjpe, 2010). Furthermore; Erikson’s concept of identity is based on an individualistic premise of personal identity, whereas Eastern/Asian cultures tend to promote a collectivistic sense of view of interpersonal identity (Yeh & Huang, 1996).

The construct of self and identity are described differently within the Hindu/Advaita and Buddhist philosophy. As discussed by Paranjpe (2010), the Advaita philosophy describes the transcendental self as the “unity and permanence underlying the varied and changing images of the self through the entire span of life”. Despite the evolving nature of the universe, this philosophy describes the possibility of experiencing an unchanging sense of self through systematic self-examination. Contrary to the Advaita philosophy and Erikson’s description of the self, the Buddhist philosophy professes the “no-self theory”. Buddhism denies the existence of the permanent ego and considers it to be the cause of all sufferings (Nagai, 2007 & Paranjpe, 2010). As stated above, there appears to be fundamental differences in the construct of self and identity.

Nagai (2007) stated that Eastern psychology is more likely to perceive “self” as a collective or familial self as compared to the Western psychology, which views it through a lens of seeking autonomy and individuality. She described affect expression and the perception of which values are most acceptable within each cultural and spiritual setting, as other existing differences between Eastern and Western cultures. For example, suppression, a defense
mechanism, is vastly observed within the Eastern culture. It is believed that these suppressed feelings and thoughts may be expressed through cultural, religious and spiritual beliefs and practices. Hence, within the Eastern culture, it is possible that people’s lack of indulgence in active questioning about existing religious, spiritual and cultural beliefs might be an adaptive mechanism. Based on the above, it is also noted that understanding the self appears to be contrary within Eastern and Western cultures. Also, considering the significant impact of Erikson’s theory in attempting to understand identity development, it is highly plausible for these cultural and philosophical experiences to be misinterpreted as failures to form an achieved identity and ego function. The applicability of Western concepts of identity formation in East Asian cultures (China, Taiwan and Japan) and USA was assessed by Berman, You, Schwartz, Teo, & Mochizuki (in press). Although the identity status model was generalizable across the Western sample, it was not found to be fully generalizable across the East Asian groups. The dimension of exploration, measured by the Ego Identity Process Questionnaire (EIPQ) scale, indicated no invariance across samples. Their results also indicated that Asians were significantly lower on commitment and identity distress as compared to Americans. Further, nationality (i.e. being American or Asian) and commitment were found to significantly predict identity distress. These results suggest that the process of identity formation within Asian cultures might not necessarily involve crisis, exploration, self-discovery, and commitment as delineated by Erikson (1963, 1968) and Marcia (1967).

Summary

The past two decades has undoubtedly seen an increase in the study of the links between spirituality, religiousness and psychological adjustment. The relationship of religiosity (the attendance, belief and practice of one’s religion and rituals) and quest (the process of existential
and religious questioning and pursuit of its understanding) has been insignificantly studied in psychology from an identity status perspective. Further, Sandage, Jankowski, & Link (2010) discussed the lack of empirical investigation in the study of spiritual and religious change; especially in adulthood. With the exception of a few studies (Leak, 2009; Fulton 1997; Mosher & Handal, 1997) study, no psychological research has attempted to understand the relationship between religious commitment and identity formation from an Eriksonian perspective. Besides, it is noted that in the psychology literature, there appears to be nominal incorporation and documentation of the role played by culture and diverse philosophical and spiritual teachings (Nagai, 2007). This study attempts to further investigate the relationship between religiosity, quest and identity formation across two cultures: USA and India.

**Rationale and Hypotheses**

The purpose of the current study is to examine the empirical links between religiosity, religious quest, and identity distress from an identity status paradigm.

Following the findings of Leak (2009) and Thompson (1991), it is hypothesized that females will have greater religiosity as compared to males amongst the Indian and USA sample. In our second hypothesis, we attempted to study the differences in identity statuses across the Indian and USA sample. Based on previous findings (Berman, You, Schwartz, & Mochizuki, 2009; Lewis, 2003; Tzuriel, 1984; Markus & Kitayama, 1991) we predicted that the USA sample will be found more among the achieved and moratorium ego identity statuses (higher in identity exploration and identity distress), while those in the Indian sample will be found more frequently in the foreclosed and diffused ego identity statuses (low on exploration and identity distress). In addition, we are interested in examining the association between religious variables (religiosity and quest) and identity variables for adolescents in the Indian and USA sample. Our third
hypothesis has considered the individualistic and collectivistic nature of the USA and India respectively, and the probability of lower exploration and higher commitment in the Indian culture. It is hypothesized that participants from India will have greater religiosity and lesser quest as compared to those in the USA, but their religiosity and quest will be less related to the identity variables (identity distress, identity commitment, and identity exploration) than it is in the USA sample.
CHAPTER TWO: METHODS

Participants

A total of 326 undergraduate students were recruited from two urban colleges in Mumbai, India and Central Florida, USA for this study. The Indian sample (n= 159) consisted of 134 females and 25 males. In this sample, the majority 40.3 % reported their academic year as Freshmen, with 33.3% Sophomores and 26.4 % Juniors. The majority of the Indian sample identified their region of origin as Maharashtra (61%), which is located in the western part of India. Among this sample 48.4% reported their religion as Hindu, 22.6% as Islamic, 20.1% Christian, 2.5 % Agnostic, 0.6% Atheist, and 5.0 % other.

The USA sample (n= 167) comprised of 135 females and 32 males. Within the USA sample, there were 41.9% Freshmen, with 24.6% Sophomores and greater number of Juniors 33.5%. In regard to ethnic/ cultural identification, the USA sample was 66.5% White/ Caucasian (non- Hispanic), 14.4% Hispanic, 7.2% Black (non- Hispanic), 6.0% Mixed ethnicity, 4.8% Asian, and 1.2% other. Within the USA sample 63.5 % reported their religion as Christian, 19.8 % Agnostic, 8.4% Jewish, 6.0 % Atheist, 1.8 % Buddhist and 0.6 % Islamic.

The two samples did not significantly differ in age (for India, mean age = 19.4, sd= 1.4; for USA, mean age = 19.6, sd = 1.7). The Indian and USA sample were not significantly different in sex and grade distribution.
**Measures**

*Demographic Information*

Participants were asked to report their gender, age, ethnic/cultural identity, highest level of education, country of origin and religious affiliation.

*Religiosity*

Not wanting to use measures such as Allport & Ross’s I/E Scale that measures religious dimensions with multiple references to the deity “God”, which is generally emphasized in Christianity, the author decided to create a novel scale for religiosity. By creating this measure of religiosity, the author attempted to be sensitive to diverse religions across diverse cultures. Religiosity was measured by three questions: (1) how much do you know about your religion?, (2) to what degree do you believe in your religion?, and (3) to what degree do you practice your religion (such as attending religious meetings, practicing religious activities like saying prayers, meditation, or religious study)? Each of these questions was rated on a 5-point scale. For the first question the anchors were: Not at all, A little bit, Somewhat, Most of it, All of it. While for the next two questions the anchors were: Not at all, Slightly, Moderately, Sincerely, Strictly. A total religiosity score was calculated by adding the responses to these three questions. The internal consistency reliability (Cronbach’s Alpha) for this scale was calculated as 0.75. For the Indian sample, the internal consistency reliability (Cronbach’s Alpha) for religiosity was calculated as 0.79, while for the USA sample it was 0.73.

*Quest Scale*

The Quest scale (Batson & Schoenrade, 1991) was designed to measure “quest” of religion, which is defined as “the degree to which an individual’s religion involves an open-ended, responsive dialogue with existential questions raised by the contradictions and tragedies
of life” (Batson & Schoenrade, 1991, p. 431). The Quest scale consisted of 12 items which assessed three aspects of the quest orientation: (1) readiness to face existential questions without reducing their complexity, (2) self-criticism and perceptions of religious doubts as positive, and (3) openness to change (Batson et al., 1993). Batson and colleagues usually reported scores of the Quest Scale by their overall mean and obtained a test-retest reliability of 0.79.

In the entire Quest scale, there is only a single reference to a deity within the 11th statement. The statement is worded as: “God wasn’t very important to me until I began to ask questions about the meaning of my own life”. As observed, the wording is ambiguous with respect to deities, which facilitates broader applicability across diverse religious samples.

Two items have been eliminated while incorporating the Quest Scale within the battery of measures. They were deleted as a result of an error that occurred while formatting and numbering the items on the scale. The deleted items were “I find religious doubts upsetting” and “I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world”. The former is an item to measure the dimension of self-criticism and perceptions of religious doubts while the latter is a measure of readiness to face existential questions without reducing their complexity. In this study, the internal consistency reliability (Cronbach’s Alpha) for the Quest scale, exclusive of the above mentioned items, was found to be 0.67.

Identity Distress Survey (IDS)

The Identity Distress Survey (IDS; Berman et al., 2004) measures distress associated with unresolved identity issues. This survey was modeled on the DSM-III and DSM-III-R criteria for Identity Disorder but can also be used with the DSM-IV criteria for Identity Problem. It asks participants to rate on a 5-point scale the degree to which they have been recently upset,
distressed, or worried over the following issues: long-term goals, career choice, friendships, sexual orientation and behavior, religion, values and beliefs, and group loyalties. This survey includes questions on how long the distress has been experienced and to what degree it is interfering with daily functioning. The internal consistency of the IDS has been reported as 0.84 with test-retest reliability of 0.82.

The IDS was found to be appropriately correlated with other measures of identity development (Berman et al., 2004). Hernandez et al., (2006) found significant associations between identity distress and both the internalizing and externalizing symptoms. In observing the relationship between identity distress and adjustment, Berman, Weems & Petkus (2009) found that identity distress was a better predictor of psychological adjustment than identity development alone. The IDS measure can be scored as a continuous variable (average distress ratings) or as a dichotomous variable (whether or not one meets the DSM-IV diagnostic criteria for Identity Problem). In this study, the internal consistency reliability (Cronbach’s alpha) for the IDS was calculated as 0.78.

*Ego Identity Process Questionnaire (EIPQ)*

The Ego Identity Process Questionnaire (EIPQ; Balistreri, Busch-Rossnagel, & Geisinger, 1995) was used to identify participants’ identity status. The EIPQ measures identity development that assesses the degree to which a participant has explored and committed to a firm sense of identity with respect to eight major psychological domains (Occupational goals, Values, Religion, Politics, Family, Friendships, Dating, and Sex Roles). It has two subscales, identity exploration and identity commitment. Cronbach’s alpha for the exploration subscale was reported to be 0.86 with test-retest reliability of 0.76. While Cronbach’s alpha for the
commitment subscale was reported to be 0.80 with test-retest reliability of 0.90 (Balistreri et al., 1995).

Participants who score low in exploration and commitment (below 3.5 on a rating scale from 1 to 5) were classified as “diffused” while those who score high in both exploration and commitment were classified as “achieved”. Participants were classified as “foreclosed” when they score low in exploration but high in commitment and were classified as the “moratorium” status when they score high in exploration but low in commitment. In this study, the internal consistency reliability (Cronbach’s alpha) for this scale was calculated as 0.60.

*Brief Symptom Inventory-18 (BSI-18)*

Brief Symptom Inventory – 18 (BSI-18; Derogatis, 2000). The BSI-18 is a self-report measure that consists of 18-items assessing psychological symptoms. It is a briefer version of the original 90- item Symptom Checklist-90-R (SCL-90-R; Derogatis, 1994). The items on the BSI-18 are rated on a 5-point scale ranging from 0 (not at all) to 4 (extremely) to indicate the level of distress an individual has experienced by each of the symptoms during the previous month.

This self-report survey measured three primary symptom dimensions: Depression, Anxiety, and Somatization. It also yields a global severity index (GSI), which is an average of the three subscales. It is designed to provide an overview of a patient’s symptoms and their intensity at a specific point in time. This scale has good reliability and validity (Derogatis & Fitzpatrick, 2004). The BSI-18 scale correlates highly (i.e., > .90) with analogous scores from its parent measure, the SCL-90-R test. For this study, the internal consistency reliability (Cronbach’s alpha) was calculated as 0.91.
**Procedure**

All participants were provided with the IRB approved explanation of research participation, following which they voluntarily completed the battery of measures. This battery included the measure of Religiosity, the Quest scale, the Identity Distress Survey (IDS), the Ego Identity Process Questionnaire (EIPQ), and the Brief Symptom Inventory-18 (BSI-18). It was administered to a total sample of 326 undergraduate college students in Mumbai, India and in Central Florida, USA.

Since the instructional language for the participants in the India sample is English, they were provided with an English version of the battery without any translation. A total of 159 undergraduate college students from two urban colleges in Mumbai, India were provided with a paper-based battery (see APPENDIX C) of measures. The majority of the Indian undergraduate students attended classes on introduction to psychology, with only a few who pursued their major as psychology. They voluntarily participated in this study with a compliance rate of 95% and did not receive any participation credit as part of their academic curriculum.

A total of 167 undergraduate students, from a metropolitan university in Central Florida, participated through an online survey that consisted to the same battery of measures provided to the Indian sample (see APPENDIX D). The only difference between these two batteries consisted of the question on country/region of origin. The participants in the USA sample were students of introduction to psychology courses and received participation credit for successfully completing the battery of measures.
CHAPTER THREE: RESULTS

Descriptive and Preliminary Results

Measures by Demographics

Religiosity

On the range from 1 to 15, the religiosity scores ranged from 9.77 to 9.25, with a scale mean of 9.50 and standard deviation of 2.46. Religiosity was negatively correlated with age ($r = -0.33; p = .016$). A 2 x 2 analysis of variance (ANOVA) was conducted to determine if there were differences in religiosity by sample and/or gender. Results indicated a significant main effect for gender ($F_{(1, 321)} = 12.69; p < .001$), with females scoring significantly higher, than males. The was no main effect for sample, however there was a significant interaction effect ($F_{(1, 321)} = 6.74; p = .01$). As can be seen in figure 1 below, Indian females scored the highest, followed by American females, then American males, and Indian males scored the lowest.

Figure 1: Interaction of religiosity means for Indian and USA samples by gender
Religiosity was further broken down into its three component parts, and a series of t-test analyses were conducted by sample, revealing a significant difference \( (t_{(324)} = 4.120, \ p < .001) \) for the question “Do you practice your religion?”. For this question, the Indian sample scored a significantly higher mean of 2.97 and sd= 1.03, as compared to the USA sample whose mean score was 2.47 and sd= 1.16. The samples did not differ in their religious knowledge and strengths of their religious beliefs. See Table 1 for a breakdown of religiosity factors in within the sample.

Table 1: Religiosity factors by country

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much do you know about your religion?</td>
<td>3.30 (0.89)</td>
<td>3.36 (0.91)</td>
</tr>
<tr>
<td>To what degree do you believe in your religion?</td>
<td>3.49 (0.92)</td>
<td>3.41 (1.03)</td>
</tr>
<tr>
<td>To what degree do you practice your religion?</td>
<td>2.97 (1.03)(^{†})</td>
<td>2.47 (1.16)(^{†})</td>
</tr>
</tbody>
</table>

\(^{†}\) Significant difference between means \( p < .001 \).

Finally, a One-way ANOVA for three religious affiliation groups (Christian, Islamic and Hindu) from the Indian sample yielded significant differences in religiosity \( (F_{(2,142)} = 24.76, \ p < .001) \). Scheffé post hoc analysis showed that the three groups were significantly different from each other with the Islamic group scoring the highest (mean= 11.61, sd = 2.03), followed by the Christian group (mean= 10.23, sd= 2.01), and the Hindu group scored the lowest (mean= 8.75, sd= 2.07).
Quest Scale

A 2 x 2 analysis of variance (ANOVA) indicated no differences in quest by sample or gender, and no interaction effect. Quest was also not correlated with age. A One-way ANOVA for three religious affiliation groups (Christian, Islamic and Hindu) from the Indian sample yielded significant differences ($F_{(2,142)} = 13.09$, $p < .001$) on quest scores. Scheffe’s post hoc analysis showed that the Hindu group (mean= 2.94, $sd = .50$) and the Christian group (mean= 2.73, $sd = .47$) scored significantly higher than the Islamic group (mean= 2.40, $sd = .59$). There was no statistical difference between the Christian and Hindu groups.

Identity Distress Survey (IDS)

The “average distress rating” ranged from 1 to 4.43 on a possible scale from 1 to 5, with a mean of 2.38 and $sd = 0.65$. A 2 x 2 analysis of variance (ANOVA) was conducted to determine if there were differences in identity distress by sample and/or gender. Results indicated a significant main effect for sample ($F_{(1,322)} = 8.81; p = .003$), with the group from India scoring significantly higher than the group from the USA. There was no main effect for gender, nor an interaction effect. Identity distress was also not correlated with age. Upon using the DSM-IV scoring criteria for Identity Problem, there was a statistically significant difference ($\chi^2_{(1)} = 9.42$, $p = .002$) between the two countries (25.2% for India sample, 12.1% for USA sample). T-test analyses were conducted across the different domains within the Identity Distress Scale (IDS) by sample, which indicated statistical differences in distress over values ($t_{(324)} = 4.05$, $p < .001$) and over group loyalties ($t_{(324)} = 3.05$, $p = .002$). As can be seen in Table 2, the Indian sample was found to experience greater distress over values and group loyalties as compared to the USA sample.
Table 2: Means and Standard Deviations for domains of the IDS.

<table>
<thead>
<tr>
<th>Domains of IDS</th>
<th>India</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>3.20 (1.21)</td>
<td>3.17 (1.05)</td>
</tr>
<tr>
<td>Career</td>
<td>3.30 (1.20)</td>
<td>3.07 (1.13)</td>
</tr>
<tr>
<td>Friends</td>
<td>2.85 (1.26)</td>
<td>2.72 (1/17)</td>
</tr>
<tr>
<td>Sexual</td>
<td>1.56 (.89)</td>
<td>1.64 (1.01)</td>
</tr>
<tr>
<td>Religion</td>
<td>1.74 (1.08)</td>
<td>1.70 (.97)</td>
</tr>
<tr>
<td>Values</td>
<td>2.39 (1.25)</td>
<td>1.89 (.98)</td>
</tr>
<tr>
<td>Group Loyalties</td>
<td>2.25 (1.15)</td>
<td>1.89 (.94)</td>
</tr>
</tbody>
</table>

1 Significant difference between means p < .001.

Ego Identity Process Questionnaire (EIPQ)

The Identity status distribution was assessed by using a median split of 3.5 for the EIPQ rating scale ranging from 1 to 5. It is noted that 46.0% of the entire sample were in the diffused category, followed by 31.0% in the moratorium, 17.5% in the foreclosed and 5.5% in the achieved category. Chi-square analysis of the distribution indicated a significant difference in ego identity status by sample ($\chi^2(3) = 31.04, p < .001$). From Table 3, it appeared that a higher percentage within the Indian sample (61.0%) as compared to the USA (31.7%) sample were in the “diffused” category. However, the Indian sample was less likely to be foreclosed (12.6 %) than the USA participants (22.2%). Also, the USA group had a greater percentage of participants in the moratorium and achieved status (46.1%), as compared to the Indian participants (36.4%).
Table 3: Frequency distribution for identity status by sample

<table>
<thead>
<tr>
<th></th>
<th>Diffusion</th>
<th>Percentage</th>
<th>Foreclosure</th>
<th>Moratorium</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>61.0%</td>
<td>12.6%</td>
<td>24.5%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>31.7%</td>
<td>22.2%</td>
<td>37.0%</td>
<td>9.0%</td>
<td></td>
</tr>
</tbody>
</table>

A 2 x 2 analysis of variance (ANOVA) was conducted to determine if there were differences in identity exploration by sample and/or gender. Results indicated a significant main effect for sample ($F_{(1, 322)} = 13.12; p < .001$), with the group from USA scoring significantly higher than the group from India. There was no main effect for gender, nor an interaction effect. Identity exploration was also not correlated with age. A further series of t-test analyses were conducted on the subareas (domains) of identity exploration which indicated that the USA sample scored higher in the areas of political exploration ($t_{(324)} = -2.56, p = .011$), occupation exploration ($t_{(324)} = -3.83, p < .001$), values exploration ($t_{(324)} = -3.15, p = .002$), dating exploration ($t_{(324)} = -5.76, p < .001$), and family role exploration ($t_{(324)} = -2.89, p = .004$).

Another 2 x 2 analysis of variance (ANOVA) was conducted to determine if there were differences in identity commitment by sample and/or gender. Results indicated a significant main effect for sample ($F_{(1, 322)} = 10.42; p = .001$), with the group from the USA scoring significantly higher than the group from India. There was also a main effect for gender ($F_{(1, 322)} = 7.26; p = .007$), but no interaction effect. Identity commitment was also not correlated with age.
Table 4: Means and Standard Deviations for Identity Commitment

Country (means/ sd)

<table>
<thead>
<tr>
<th>Gender</th>
<th>India</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>50.47 (5.52)</td>
<td>52.60 (7.20)</td>
</tr>
<tr>
<td>Male</td>
<td>47.00 (5.85)</td>
<td>50.97 (7.22)</td>
</tr>
</tbody>
</table>

A further series of t- test analyses were conducted on the subareas (domains) of identity commitment which indicated that the USA sample scored higher in the areas of political commitment ($t_{(324)}=-4.72$, $p < .001$), values commitment ($t_{(324)}=-1.99$, $p = .048$), and dating commitment ($t_{(324)}=-3.62$, $p < .001$). In regard to gender, females were more committed than males in political commitment ($t_{(324)}=-2.63$, $p = .009$), religious commitment ($t_{(324)}=-2.18$, $p = .030$), and sex role commitment ($t_{(324)}=-2.29$, $p = .023$).

A One-way ANOVA for three religious affiliation groups (Christian, Islamic and Hindu) from the Indian sample yielded significant differences ($F_{(2,142)}=5.78$, $p = .004$) on identity commitment. Scheffe’s post hoc analysis showed that the Islamic group (mean= 52.53, sd = 5.55) was significantly higher than the Hindu group (mean= 48.68, sd = 5.50) and was not statistically different from the Christian group (mean= 50.25, sd = 6.03). The post hoc analysis did not indicate a statistical difference in commitment between the Christian and Hindu groups.

**Brief Symptom Inventory-18 (BSI-18)**

On a scale from 1 to 5, the global severity index (GSI) score for the entire sample ranged from 1 to 4.06, with a mean of 1.83 and sd of 0.66. A 2 x 2 analysis of variance (ANOVA) was conducted to determine if there were differences in symptom severity (GSI) by sample and/or gender. Results indicated a significant main effect for sample ($F_{(1,322)}=12.29; p = .001$), with the group from India scoring significantly higher in symptom severity (anxiety, depression, and
somatization) than the group from the USA. There was no main effect for gender, nor an interaction effect. Symptom severity was also not correlated with age.

A One-way ANOVA for three religious affiliation groups (Christian, Islamic and Hindu) from the Indian sample obtained no significant differences in symptom severity (GSI).

*Interaction of Measures*

*Correlations*

As can be seen in Table 4, religiosity and quest were significantly correlated with all three identity variables. Religiosity was positively correlated with identity commitment, but inversely correlated with identity exploration and identity distress. Conversely, quest was inversely correlated with identity commitment, but positively correlated with identity exploration and identity distress. Quest was also positively correlated with psychological symptom severity while religiosity as inversely related to psychological symptom severity.

**Table 5: Inter-correlations of religiosity, identity, and adjustment variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Religiosity</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quest</td>
<td>-36²</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Identity exploration</td>
<td>-16²</td>
<td>.37²</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Identity commitment</td>
<td>.37²</td>
<td>-.33²</td>
<td>-.26²</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Identity Distress</td>
<td>-.22²</td>
<td>.27²</td>
<td>.21²</td>
<td>-.30²</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Symptom Severity</td>
<td>-.14¹</td>
<td>.14¹</td>
<td>.04</td>
<td>-.23²</td>
<td>.53²</td>
<td>-</td>
</tr>
</tbody>
</table>

¹ Correlation is significant at the .05 level (2-tailed)
² Correlation is significant at the .001 level (2-tailed)
A 2 x 2 x 4 (gender by sample by identity status) multivariate analysis of variance (MANOVA) was conducted with religiosity and quest as the dependent variables. Significant main effects were found for identity status in both religiosity (F(3, 310) = 10.87; p < .001) and quest (F(3, 310) = 14.73; p < .001). There were no main effects for gender or sample. Scheffé post hoc analyses showed that the achieved and foreclosed groups scored significantly higher in religiosity than the diffused and moratorium groups. For quest, the moratorium group scored significantly higher than the other three identity status groups. More detailed comparisons can be seen in Table 5.

Table 6: Means/Standard Deviations for Religiosity and Quest for Identity Status Groups

<table>
<thead>
<tr>
<th>Variables</th>
<th>Diffused</th>
<th>Foreclosed</th>
<th>Moratorium</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religiosity Score</td>
<td>9.41 (2.39)</td>
<td>10.70 (2.39)</td>
<td>8.70 (2.39)</td>
<td>10.89 (1.99)</td>
</tr>
<tr>
<td>Quest Score</td>
<td>2.80 (0.52)</td>
<td>2.42 (0.52)</td>
<td>3.12 (0.54)</td>
<td>2.67 (0.61)</td>
</tr>
</tbody>
</table>

Like superscripts indicate significant differences at p < .05

There was also a three way interaction (sample by gender by identity status) for religiosity that was statistically significant using the Roy’s Largest Root test (F(2, 310) = 4.10; p = .017), but not when using Pillai’s Trace, Wilks’ Lambda, or Hoteling’s Trace. The interactions for males and females can be seen in figure 2 (see next page).
A 2 x 2 x 2 (gender by sample by Identity Problem diagnostic status) multivariate analysis of variance (MANOVA) was conducted with religiosity and quest as the dependent variables. A significant main effect was found for gender in religiosity ($F_{(1, 317)} = 10.10; p = .002$), with females being more religious than males, but no difference for gender was found for quest. There were no main effects for gender or sample in quest. Significant main effects were also found for DSM IV Identity Problem diagnostic status in both religiosity ($F_{(1, 317)} = 5.73; p = .017$) and quest ($F_{(1, 317)} = 6.85; p = .009$). Those that met for Identity Problem diagnosis, on average, had lower scores on religiosity and higher scores on quest than those that did not meet the diagnosis. There was no main effect for sample, nor were there any significant interactions.

**Regression**

In order to test the hypothesis that religious variables would be less related to the identity variables among the Indian sample as compared to the USA sample, several multiple regression
analyses were conducted. They were conducted separately for two samples. In each regression, age and sex were entered on step 1, the symptom severity score was entered on step 2, with the identity variables entered on step 3.

Using religiosity as the dependent variable, the regression equation was significant for both, the Indian sample [$R^2 = 0.22$, Adjusted $R^2 = 0.19$, $F(6,151) = 7.20$, $p < .001$] and the USA sample [$R^2 = 0.22$, Adjusted $R^2 = 0.19$, $F(6,160) = 7.57$, $p < .001$]. For the Indian sample, at step 3, the change in $R^2$ was significant [change in $F(3,151) = 5.96$, $p = 0.001$; change in $R^2 = .09$] with standardized beta coefficients reaching significance for sex ($\beta = .26$, $t = 3.38$, $p = .001$) and commitment ($\beta = .30$, $t = 3.86$, $p < .001$). In terms of the USA sample, at step 3, the change in $R^2$ was significant [change in $F(3,160) = 9.46$, $p < .001$; change in $R^2 = 0.14$] with standardized beta coefficients reaching significance only for commitment ($\beta = .35$, $t =4.37$, $p < .001$).

With quest as the dependent variable, the overall model was significant for the Indian sample [$R^2 = 0.20$, Adjusted $R^2 = 0.17$, $F(6,152) = 6.37$, $p < .001$]. At step 3, the change in $R^2$ was significant [change in $F(3, 152) = 11.83$, $p < .001$; change in $R^2 = 0.19$] with standardized beta coefficients reaching significance for identity exploration ($\beta = 0.27$, $t = 3.45$, $p = .001$) and identity commitment ($\beta = -0.21$, $t = -2.62$, $p = .010$). With respect to the USA sample, the overall model was significant [$R^2 = 0.24$, Adjusted $R^2 = 0.22$, $F(6, 160) = 8.62$, $p < .001$]. At step 3, the change in $R^2$ was significant [change in $F(3, 160) = 13.06$, $p < .001$; change in $R^2 = .19$] with standardized beta coefficients reaching significance for identity exploration ($\beta = .22$, $t = 2.91$, $p = .004$), identity commitment ($\beta = -.23$, $t = -2.99$, $p = .003$), and identity distress ($\beta = .20$, $t = 2.26$, $p = .025$).
CHAPTER FOUR: DISCUSSION

The findings of this study contribute to the current research on adolescent identity formation and distress and their relationship with religion/spirituality. This study has also extended the examination of identity variables (exploration, commitment and distress) and religious variables (religiosity and quest) of adolescents across the Eastern/Indian culture as well as the diverse religions. The total sample was not significantly different in regard to the demographic characteristics of age and gender. This sample was diverse on ethnic/cultural identification - the USA group consisted of 66% White/Caucasians (non-Hispanic), while a majority (61%) of participants in India identified as being from Maharashtra (a state, geographically located in the western part of India). Also, the USA sample was predominantly constituted of Christians (63.5%), while the Indian sample consisted primarily of Hindus (48.4%), followed by Muslims (22.6%) and Christians (20.1%).

Similar to the Mosher & Handal’s (1997) results, this study found a negative or inverse relationship between religiosity and age. This suggests that as adolescents grow older, they are likely to become less religious. When viewed developmentally, this negative relationship is predictable as adolescents tend to be more rebellious and less compliant in their attempt to self-search their sense of identity (Erikson, 1968). The results also indicated that quest, average distress rating, identity status and symptom severity were not correlated to age.

Females had greater religiosity than males in both the Indian and USA sample. The results indicated significant gender differences only for religiosity. Also, there was a noteworthy pattern in that the gender gap was greater in the Indian sample than in the USA sample, whereby the Indian females scored higher, than both the American females and the American males, and the Indian males scored lower than both the American females and males. While American
females scored higher than American males, clearly the split was smaller than in the Indian sample. Leak (2009) reported that women were higher on extrinsic religiosity as compared to men but found no gender differences for identity status groups. This study also found that females scored higher on identity commitment as compared to males across both samples. Unlike the findings by Basak & Ghosh (2008), the female participants in this study were more committed than males in their ideological beliefs (political and religious views) and sex role commitment.

One possible reason for this gender difference might be that females in India are more bound by cultural norms and gender stereotypes. Females in India are given a lesser degree of independence as compared to their male counterparts and participants in the USA. The independence afforded to many American adolescents as part of their progression to college is relatively different from the experience of most in the Indian context. Adolescents in India, especially females, are more likely to live with their parents and rarely move away from home to seek a college education. Moreover, they are expected to follow certain social norms such as refraining from alcohol/drug use and sexual encounters prior to marriage as compared to their male counterparts. In comparison to males in India, females are expected to be more traditional and religious, as they are likely to be the primary caregivers of their children. Based on the above, it might be that female religiosity is more influenced by parental and social expectations. However, it is plausible that their religiosity might positively influence their development by providing explanations that aid in the search for meaning in life. Further, Indian females’ greater involvement in religious practice might provide them with a sense of control and means to predict their future, avoid inter and intra personal conflicts as well as aid in enhancing their self
esteem (Hathaway & Pargament, 1991). Despite their greater religiosity, it is possible that they might be engaging in religious doubts, questing and pursuing spirituality.

In regard to sample differences, the Indian and USA sample did not differ on their existential questioning/ pursuit of spirituality nor in their religiosity. However, with respect to the three aspects of religiosity (knowledge, belief and practice of religion), the Indian sample reported higher religious practice and followed rituals more rigorously than their USA counterparts. Religion and inculcating religious rituals are considered vital during childhood development for Asians connected to the Indian subcontinent (Bhugra et al.; 1999). As discussed by Ano et al., (2009), this result is consistent with the collectivistic nature of the Indian culture within which religious teachings, beliefs and practices are intricately interwoven and propagated across generations.

As per our second hypothesis, the Indian participants were found more frequently in the foreclosed or diffused ego identity statuses (low on identity exploration) as compared to the USA participants, who were found more among the achieved and moratorium ego identity statuses (higher in identity exploration), thus suggesting that adolescents in the USA group are more likely to explore and commit to their own sense of identity as compared to those in the Indian group.

As expected, there were differences in identity status groups and lower identity exploration for the Indian sample as compared to their USA counterparts. These findings can be explained using the perspective of cultural diversity and ideologies promoted in Eastern/Indian and Western/American culture. Assuming the collectivistic nature of the Eastern/Indian culture, which promotes cohesion and integration with one’s society, it is less likely for adolescents to engage in questioning and exploration of their identity. Eastern/Indian adolescents are more
likely to conform and relate to a group identity than to explore one of their own. In contrast, the Western/American culture professes individualism and self growth and is more likely to encourage exploration of one’s identity and choices. Moreover, the concept of identity status paradigm is based on Erikson’s identity development, a Western concept. It is possible that identity formation across Eastern/Asian cultures might not necessarily involve crisis, exploration, self-discovery, and commitment (Berman et al., in press).

We predicted that Indians would be found more in both the diffused and foreclosed statuses. However, we were highly surprised to observe the uneven distribution within these two statuses as many Indians were in the diffused category as compared to only a few in the foreclosed. This finding was inconsistent with prior research that discussed Eastern cultures to have higher rates of foreclosure (Berman, You, Schwartz, & Mochizuki, 2009; Lewis, 2003; Markus & Kitayama, 1991). Contrary to our prediction, these results suggested that the Indian group lacked in commitment as well as in exploration. This is possibly due to social changes such as modernization, urbanization and globalization, which is presently occurring within the Indian society (Arnett, 2004; Sullins, 2006). These social changes appear to facilitate secondary and college education amongst the urban population within Indian as well creates an environment of technological advancement. Perhaps, these changes seem to vastly impact the urban population as compared to the rural within India as diversity based on age, gender, religion and caste systems are more accepted in urban settings than in the rural areas. The greater acceptance of diversity and lesser differentiations within the urban group might be attributable to the absence of asking questions such as “Who am I?” and actively exploring and committing to a sense of their identity. It is also possible that the urban Indian sample within this study belonged
to a relatively homogenous city life and urbanized environment as compared to a representative sample of adolescents within India.

The above discussed social movement might also better explain the lack of commitment and exploration as many individuals might experience a state of transition wherein they are neither exploring nor committing to the predetermined notions and information imparted by their families and society. This diffusion might also be a reflection of the simultaneous transition occurring in their lifestyle and values/belief systems within the urban Indian society. It is probable that Indian participants might be experiencing a transitional state that does not involve identity exploration and commitment, which in fact might be beneficial as they try to adapt to the rapidly changing trends (Côté, 1996; A. S. Waterman, 1999a).

Furthermore, detailed analyses of the domains in the IDS revealed that the Indian group was significantly more distressed than the USA group over the domains of value and group loyalties. The increased distress for these two domains is possibly because of the above discussed social changes (modernization, urbanization and globalization). It is highly probable that the urban Indian participants are likely to experience conflicts and distress over their values and belief systems about marriage, caste systems, gender stereotypes and social roles (Arnett, 2004).

Considering the diversity of religious affiliation within the Indian sample, differences between Christian, Islamic and Hindu religious groups were also explored. Similar analyses were not conducted for the USA sample as it consisted predominantly of Christians with no significant variations in religious affiliations. Within the Indian sample, the Islamic group was highest in religiosity, and the Hindu group was the lowest, with the Christian group in the middle. Further, the Islamic group was highest in identity commitment. The Hindu and Christian groups were
more engaged in religious/spiritual quest than the Islamic group. It is possible that the Hindu group scored the least for religiosity and was higher on questing as Hindu philosophy encourages systematic self-examination (Paranjpe, 2010). Greater religiosity among Muslim participants were expected as Islam, as a religion, promotes rituals such as performing five fundamental duties, namely, faith in God (Allah), salat (regular prayers), donating portions of one’s goods, fasting during Ramadan (holy month) and pilgrimage to Mecca (Lowenthal, 2000). Results also indicated that these three groups were not found to be different in their identity exploration, distress ratings, and psychological symptom severity. Perhaps, this is due to the collectivistic nature of the people and society within which these religions are being practiced.

A uniform pattern emerged in the correlation between religious and identity variables for the entire sample. It is noted that religiosity was positively correlated with identity commitment but negatively correlated with identity exploration and identity distress. On the other hand, quest was negatively correlated with identity commitment and positively correlated with identity exploration and identity distress.

The third hypothesis was based on investigating associations between religiosity and quest with identity variables amongst the Indian and USA sample. When examining the relationship of identity variables and its prediction of religiosity across both samples, a less intriguing differential pattern emerged. For the Indian sample, sex (gender) and identity commitment were related to religiosity, but for the USA sample only identity commitment was related to religiosity. It appears that the third hypothesis was partially confirmed for religiosity as it was not differentially related to identity variables in both the Indian and USA groups. In fact, the positive relationship between religiosity and identity commitment indicated that participants
with higher religiosity (knowledge, belief and practice of religion) were more likely to be committed to their sense of identity across both groups.

An interesting finding was obtained with regard to religious quest, an existential examination and pursuit of spirituality. As predicted, religious quest was negatively related to identity commitment and positively related to identity exploration for both groups. However, quest was related to identity distress exclusively for the USA sample and not for the Indian sample. The negative relationship between quest and commitment indicated that those who were more engaged in existential questioning and pursuit of spirituality were less likely to be committed in their sense of identity. Moreover, the relationship between quest and identity distress exclusively for the USA sample suggests that it may be a more important facet of identity formation and larger source of distress amongst American adolescents. It is possible that questing was less distressful for the Indian sample as approximately half of them reported following Hinduism, a religion that encourages systematic self-examination (Paranjpe, 2010). This form of self-examination seems closest to the Western concept of quest. Furthermore, it might be considered normal to engage in religious quest for these urban Indian adolescents, who have afforded greater liberty in thinking and cognitive autonomy as a result of their college education and urbanization.

Although people from India seem to be more religious and involved in religious practice than those from the USA, there appears to be no difference in relation to the overall sense of identity of people across both groups. Furthermore, the Indian participants’ overall higher rate of identity distress symptoms does not appear to be stemming from exploring their religious identity. It seems that religiosity and religious quest might be a more important component in identity development among adolescents in the USA than in India. Perhaps, the greater identity
distress in the Indian group might be related to their values and belief systems (about what is right or wrong) and group loyalties (their associations with specific groups, organizations and institutions) as compared to religious variables.

The above discussed findings are possibly due to the differences in Eastern and Western cultural values, teachings and beliefs of diverse religions as well as the differential role played by religion across Eastern and Western societies. Factors such as social identification, religious associations, gender stereotypes, and family values appear to play an integral role for religiosity and quest. Furthermore, the varied constructs of self and identity across Eastern and Western cultures might contribute to the dissimilarity in the pattern of religious quest and exploration within the Indian and USA sample. It is plausible that the lack of identity exploration and indulgence in active questioning about cultural beliefs might be an adaptive mechanism for Indian adolescents. Considering the philosophical differences on the construct of self and identity between predominant religions and philosophies in India and USA, it might be warranted to assess the applicability of identity crisis, exploration and commitment within the Indian culture. Also, it appears important to understand the socio-cultural factors that contribute to greater religiosity in the Indian sample as compared to those in the US. The findings accounting for greater diffusion among the Indian sample may be a transitional state due to the resultant social changes. Moreover, the lack of difference in religious exploration across both samples suggests that adolescents might engage in religious/spiritual exploration and commitment during their adulthood (Sandage et al., 2010). In order to study the developmental processes and thoroughly understand the pursuit of religious/spiritual exploration and commitment, future research using longitudinal data and broad age ranges is warranted.
Despite the findings of this study, there are certain limitations to it. First and foremost, participants in this sample were predominantly female (82.5%). The female predominant sample might have led to biased results as the findings indicated differences in terms of religiosity and identity statuses. Therefore, a more balance sample involving males and females might yield more generalizable findings. Moreover, we might have obtained biased results as our study focused on only urban college students in India, wherein seeking college education is a privilege more than any right. It appears important to reach out to participants in the larger community as compared to the mere privileged college students. Further, it would be interesting to collect data from people belonging to diverse socio-economic statuses (SES) and within both rural and urban settings in India and the USA. Despite the internal consistency of 0.67 for the Quest scale, the formatting error that led to the deletion of two items in the quest scale might have impacted the examination of religious quest among adolescents in India and USA. It must be noted that correlational data cannot determine the causal relationship between identity and religious variables. Additionally, the usage of self report measures in this study might have impacted the participants’ responses by leading them to either respond in socially desirable ways or to defensively approach certain questions. Finally, nationality was used as a classification for individualistic and collectivistic cultures, which might have led us to assume that all Americans are individualistic while all Indians are collectivistic. We are currently engaged in a follow up study whereby we quantitatively and qualitatively measure these constructs of individualism and collectivism across both cultures.

In summary, the results indicate that religion is related to identity development and distress among adolescents in India and USA. However, the degree of this relationship tends to
vary across both cultural groups, with a greater impact of identity exploration and distress on religious quest in the USA sample as compared to that in the Indian group.
APPENDIX A: NOTICE OF EXEMPT REVIEW STATUS
Notice of Exempt Review Status

From: UCF Institutional Review Board  
FWA00000351, Exp. 10/8/11, IRB00001138

To: Steven L. Berman and Niyatee Sukumaran

Date: July 21, 2009

IRB Number: SBE-09-06341

Study Title: “Diversity in Indian Culture and Identity Research”

Dear Researcher:

Your research protocol was reviewed by the IRB Vice-chair on 7/21/2009. Per federal regulations, 45 CFR 46.101, your study has been determined to be minimal risk for human subjects and exempt from 45 CFR 46 federal regulations and further IRB review or renewal unless you later wish to add the use of identifiers or change the protocol procedures in a way that might increase risk to participants. Before making any changes to your study, call the IRB office to discuss the changes. A change which incorporates the use of identifiers may mean the study is no longer exempt, thus requiring the submission of a new application to change the classification to expedited if the risk is still minimal. Please submit the Termination/Final Report form when the study has been completed. All forms may be completed and submitted online at https://iris.research.ucf.edu.

The category for which exempt status has been determined for this protocol is as follows:

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures, or the observation of public behavior, so long as confidentiality is maintained.

(i) Information obtained is recorded in such a manner that the subject cannot be identified, directly or through identifiers linked to the subject, and/or

(ii) Subject’s responses, if known outside the research would not reasonably place the subject at risk of criminal or civil liability or be damaging to the subject’s financial standing or employability or reputation.
The IRB has approved a **waiver of documentation of consent** for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet. For online surveys, please advise participants to print out the consent document for their files.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 07/21/2009 09:41:16 AM EDT

Janice Turchin
IRB Coordinator
University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Steven L. Berman and Co-PIs: Min Cheng, Niyatee Sukumaran

Date: October 21, 2009

Dear Researcher:

On 10/21/2009, the IRB approved the requested addendum – research conducted on SurveyMonkey with UCF students and also students at additional universities -- for human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Cultural Diversity and Identity Research
Investigator: Steven L Berman
IRB Number: SBE-09-06292
Funding Agency: 
Grant Title: 
Research ID: N / A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB.

NOTE: When using consent document with students of other universities, please delete the paragraph regarding UCF IRB office contact information. You may also need to make other modifications such as extra credit statement. Be sure to obtain permission from the appropriate institutional officials to contact non-UCF students.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 10/21/2009 09:21:16 AM EDT
IRB Coordinator
University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html
APPENDIX C: INFORMED CONSENT - INDIAN SAMPLE
INFORMED CONSENT

Please read this consent document carefully before you decide to participate in this study.

Project title: “Diversity in Indian Culture and Identity Research”

Purpose of the research study: The purpose of this study is to examine the impact of Indian Culture and individual differences in how people think about themselves and their identity.

Criteria for eligibility: All college undergraduates who are above the age of 18 and fluent in English are encouraged to participate in the research study.

Sample Size: 300 undergraduate/graduate students

What you will be asked to do in the study: This survey contains six sections for a total of 100 questions.

Time required of subjects: Approximately thirty to forty minutes.

Risks: The study is minimal risk or less and these risks are no greater than those encountered in daily lives of healthy persons. There is a possibility that some of the questions may bring back unpleasant memories which may cause you to feel uncomfortable. In such a case, you may choose to discontinue your participation from this study

Benefits/Compensation: There is no compensation for participating in this survey.

Confidentiality: This study is anonymous. Your name is not requested and should not be reported. Your information will be assigned a code number which cannot be traced back to you. The consent forms will be given to you and only the answer sheets will be used by the investigator to collect and understand the results of this study.

Voluntary participation: Your participation in this study is voluntary. There is no penalty for not participating and you do not have to answer any question that you would prefer not to

Right to withdraw from the study: You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study: You may contact Niyatee Sukumaran or her faculty advisor, Dr. Steven L. Berman, Psychology Department, Building #140, Suite #310, University of Central Florida, Daytona Beach campus, 1200 W. International Speedway Blvd., Daytona Beach, FL 32114 USA; 386-506-4049; niyatee.sukumaran@gmail.com or sberman@mail.ucf.edu.

Whom to contact about your rights in the study: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board. Questions or concerns about research participants' rights may be directed to the UCF IRB.
office, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246, or by campus mail 32816-0150. The hours of operation are 8:00 am until 5:00 pm, Monday through Friday except on University of Central Florida official holidays. The telephone numbers are (407) 882-2276 and (407) 823-2901. E-mail address is: IRB@mail.ucf.edu.

Submission of a completed survey implies that you have read the information in this form and consent to take part in the research. Please keep this form for your records or future reference.
APPENDIX D: SURVEY – INDIAN SAMPLE
BACKGROUND QUESTIONNAIRE

Please use the Bubble Sheet provided to fill in your background information as follows.

**Name:** Leave blank.

**Sex:** Mark MALE or FEMALE

**Grade or Education:** Use the following codes:
- (13)= First Year [Careful! Mark (13) and not (1) and (3)]
- (14)= Second Year
- (15)= Third Year
- (16)= Fourth Year

**Birth Date:** Leave blank.

**Identification NO:**

**A:** Mark your Marital Status under column A
- (0) Single
- (1) Married
- (2) Divorced
- (3) Widowed
- (4) Separated

**BC:** Mark your Age under columns B & C

**D:** Mark the following identifier that best describes you under column D
- (0)= Open Category
- (1)= Minority (depending upon the college)
- (2)= Reserved (SC/ ST)
- (3)= Special Category (Army, Navy, Air force)
- (4)= Other

**E:** Mark you religious affiliation in column E & F

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F: Indicate your region of origin code in column G and H.

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Now please turn over the bubble sheet and complete the survey. Thank you.
1. How much do you know about your religion?
   1. Not at all
   2. A little bit
   3. Somewhat
   4. Most of it
   5. All of it

2. To what degree do you believe in your religion?
   1. Not at all
   2. Slightly
   3. Moderately
   4. Sincerely
   5. Strictly

3. To what degree do you practice your religion (such as attending religious meetings, practicing religious activities like saying prayers, meditation, or religious study)?
   1. Not at all
   2. Slightly
   3. Moderately
   4. Sincerely
   5. Strictly

EXPOSURE TO GLOBAL FACTORS

4. How often do you use the Internet?
   1. Not at all
   2. A little bit
   3. Somewhat
   4. Often
   5. Very often

5. How long have you been using the Internet?
   1. Never
   2. 1-3 years
   3. 4-6 years
   4. 7-9 years
   5. 10 years or more

6. How many people do you know who are not from your own country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6
7. How many teachers have you had who are not from your own country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

8. How many times have you traveled abroad?
   1. Never
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

9. How many of your relatives (including your parents or yourself) are married to someone from another country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

**QUEST SCALE**

Please indicate the extent to which you agree or disagree with each of the items by using the following scale.

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<tr>
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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. As I grow and change, I expect my religion also to grow and change.
11. I am constantly questioning my religious beliefs.
12. It might be said that I value my religious doubts and uncertainties.
13. I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.
14. For me, doubting is an important part of what it means to be religious.
15. I do not expect my religious convictions to change in the next few years.
16. I find religious doubts upsetting. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
17. My life experiences have led me to rethink my religious convictions.
18. There are many religious issues on which my views are still changing.
19. God wasn’t very important to me until I began to ask questions about the meaning of my own life.
20. Questions are far more central to my religious experience than are answers.
IDENTITY DISTRESS SURVEY

Instructions: To what degree have you recently been upset, distressed, or worried over the following issues in your life?

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<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Mildly</td>
<td>Moderately</td>
<td>Severely</td>
<td>Very Severely</td>
</tr>
</tbody>
</table>

21. Long-term goals? (e.g., finding a good job, being in a romantic relationship, etc.)
22. Career choice? (e.g., deciding on a trade or profession, etc.)
23. Friendships? (e.g., experiencing a loss of friends, change in friends, etc.)
24. Sexual orientation and behavior? (e.g., feeling confused about sexual preferences, intensity of sexual needs, etc.)
25. Religion? (e.g., stopped believing, changed your belief in god/religion, etc.)
26. Values or beliefs? (e.g., feeling confused about what is right or wrong, etc.)
27. Group loyalties? (e.g., belonging to a club, school group, gang, etc.)
28. Please rate your overall level of distress (how bad they made you feel) about all of the above issues that might have upset or distressed you as a whole.
29. Please rate how much uncertainty over these issues as a whole has interfered with your life (for example, stopped you from doing things you wanted to do, or being happy)
30. How long (if at all) have you felt upset, distressed, or worried over these issues as a whole?
   (1) Never or less than a month
   (2) 1 to 3 months
   (3) 3 to 6 months
   (4) 6 to 12 months
   (5) More than 12 months

EIPQ

Instructions: For the following 32 statements, please decide how much you agree or disagree with each, using the following scale. Please bubble in the appropriate number on the enclosed answer sheet.

<table>
<thead>
<tr>
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<tr>
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<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

31. I have definitely decided on the occupation I want to pursue.
32. I don’t expect to change my political principles and ideals.
33. I have considered adopting different kinds of religious beliefs.
34. There had never been a need to question my values.
35. I am very confident about which kinds of friends are best for me.
36. My ideas about men’s and women’s roles have never changed as I became older.
37. I will always vote for the same political party.
38. I have firmly held views concerning my roles in my family.
39. I have engaged in several discussions concerning behaviors involved in dating relationships.
40. I have considered different political views thoughtfully.
41. I have never questioned my views concerning what kind of friend is best for me.
42. My values are likely to change in the future.
43. When I talk to people about religion, I make sure to voice my opinion.
44. I am not sure about what type of dating relationship is best for me.
45. I have not felt the need to reflect on the importance I place on my family.
46. Regarding religion, my views are likely to change in the near future.
47. I have definite views regarding the ways in which men and women should behave.
48. I have tried to learn about different occupational fields to find the one best for me.
49. I have undergone several experiences that made me change my views on men’s and women’s roles.
50. I have re-examined many different values in order to find the ones that are best for me.
51. I think that what I look for in a friend could change in the future.
52. I have questioned what kind of date is right for me.
53. I am unlikely to alter my vocational goals.
54. I have evaluated many ways in which I fit into my family structure.
55. My ideas about men’s and women’s roles will never change.
56. I have never questioned my political beliefs.
57. I have had many experiences that led me to review the qualities that I would like my friends to have.
58. I have discussed religious matters with a number of people who believe differently than I do.
59. I am not sure that the values I hold are right for me.
60. I have never questioned my occupational aspirations.
61. The extent to which I value my family is likely to change in the future.
62. My beliefs about dating are firmly held.

BSI 18

Instructions: Below is a list of problems people sometimes have. Read each one carefully and fill in the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU. DURING THE PAST 7 DAYS INCLUDING TODAY.

How much were you distressed by:

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<tr>
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<td>Not at all</td>
<td>A little bit</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
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</table>

63. Faintness or dizziness
64. Feeling no interest in things
65. Nervousness or shakiness inside
66. Pains in heart or chest
67. Feeling lonely
68. Feeling tense or keyed up
69. Nausea or upset stomach
70. Feeling blue
71. Suddenly scared for no reason
72. Trouble getting your breath
73. Feelings of worthlessness
74. Spells of terror or panic
75. Numbness or tingling in parts of your body
76. Feeling hopeless about the future
77. Feeling so restless you couldn’t sit still
78. Feeling weak in parts of your body
79. Thoughts of ending your life
80. Feeling fearful
APPENDIX E: WAIVER OF CONSENT - USA SAMPLE
INFORMED CONSENT

Please read this consent document carefully before you decide to participate in this study.

Project title: “Western Culture and Identity Research”

Purpose of the research study: The purpose of this study is to examine the impact of Indian Culture and individual differences in how people think about themselves and their identity.

Criteria for eligibility: All college undergraduates who are above the age of 18 and fluent in English are encouraged to participate in the research study.

Sample Size: 300 undergraduate/graduate students/adults

What you will be asked to do in the study: This survey contains six sections for a total of 100 questions.

Time required of subjects: Approximately thirty to forty minutes.

Risks: The study is minimal risk or less and these risks are no greater than those encountered in daily lives of healthy persons. There is a possibility that some of the questions may bring back unpleasant memories which may cause you to feel uncomfortable. In such a case, you may choose to discontinue your participation from this study. If you observe experiencing discomfort or distress, you may also call University of Central Florida’s Counseling Center at (407)823-2811.

Benefits: There are no expected benefits to you for taking part in this study. However, your response could help us better understand the influence of your cultural and religious background upon your identity formation. The outcome may also help you better understand the same.

Compensation or payment: If your professor is offering course credit for research participation, participation in this study will count toward your hours. Alternative methods for receiving the same quantity of extra credit will be made by your instructor for those who do not wish to participate in this or other research. There is no other compensation to you for participation.

Confidentiality: This study is anonymous. Your name is not requested and should not be reported. Your information will be assigned a code number which cannot be traced back to you. The consent forms will be given to you and only the answer sheets will be used by the investigator to collect and understand the results of this study.

Voluntary participation: Your participation in this study is voluntary. There is no penalty for not participating and you do not have to answer any question that you would prefer not to

Right to withdraw from the study: You have the right to withdraw from the study at any time without consequence.
Whom to contact if you have questions about the study: You may contact Niyatee Sukumaran or her faculty advisor, Dr. Steven L. Berman, Psychology Department, Building #140, Suite #310, University of Central Florida, Daytona Beach campus, 1200 W. International Speedway Blvd., Daytona Beach, FL 32114 USA; 386-506-4049; niyatee.sukumaran@gmail.com or sberman@mail.ucf.edu.

Whom to contact about your rights in the study: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board. Questions or concerns about research participants' rights may be directed to the UCF IRB office, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246, or by campus mail 32816-0150. The hours of operation are 8:00 am until 5:00 pm, Monday through Friday except on University of Central Florida official holidays. The telephone numbers are (407) 882-2276 and (407) 823-2901. E-mail address is: IRB@mail.ucf.edu.
Submission of a completed survey implies that you have read the information in this form and consent to take part in the research. Please keep this form for your records or future reference.
APPENDIX F: SURVEY- USA SAMPLE
BACKGROUND QUESTIONNAIRE

Name: Leave blank.

Sex: Mark MALE or FEMALE

Grade or Education: Use the following codes:
   Use 1 though 12 for grade level or
   (13)= Some college level courses up to and including AA degree
   (14)= College graduate
   (15)= Some graduate work up to and including Masters degree
   (16)= Doctoral degree

Birth Date: Leave blank.

A: Mark your Marital Status
   (0) Single
   (1) Married
   (2) Divorced
   (3) Widowed
   (4) Separated

B: Indicate your Age

C: Mark the Ethnic/Racial identifier that best describes you
   (0)=White, non-Hispanic
   (1)=Black, non-Hispanic
   (2)=Hispanic
   (3)=Asian or Pacific Islander
   (4)=Native American or Alaskan Native
   (5)=Mixed ethnicity
   (6)=Other

D: Mark you religious affiliation

| 0 = Christianity       | 6 = Shintoism           |
| 1 = Judaism            | 7 = Agnosticism         |
| 2 = Islam              | 8 = Atheism            |
| 3 = Hinduism           | 9 = Confucianism        |
| 4 = Buddhism           | 10 = Zoroastrianism     |
| 5 = Taoism             | 11 = Other             |
## E: Indicate your native country code

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<td>Serbia</td>
<td>190</td>
<td>Wallis and Futuna Islands</td>
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<td>Namibia</td>
<td>141</td>
<td>Seychelles</td>
<td>191</td>
<td>Western Sahara</td>
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<td>Nauru</td>
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<td>Sierra Leone</td>
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<tr>
<td>New Caledonia</td>
<td>146</td>
<td>Solomon Islands</td>
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<td>New Zealand</td>
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<td>Nicaragua</td>
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<td>South Africa</td>
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<td>Sudan</td>
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<td>Norfolk Island</td>
<td>152</td>
<td>Suriname</td>
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<tr>
<td>Northern Mariana Islands</td>
<td>153</td>
<td>South Africa</td>
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<tr>
<td>Norway</td>
<td>154</td>
<td>Spain</td>
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<tr>
<td>Occupied Palestinian Territory</td>
<td>155</td>
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<td>Oman</td>
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<td>Sudan</td>
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<td>Palau</td>
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<td>Swaziland</td>
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<td>Panama</td>
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<td>Sweden</td>
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<td>Papua New Guinea</td>
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<td>Switzerland</td>
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<td>Paraguay</td>
<td>161</td>
<td>Syrian Arab Republic</td>
<td>211</td>
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<tr>
<td>Peru</td>
<td>162</td>
<td>Tajikistan</td>
<td>212</td>
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<td>Philippines</td>
<td>163</td>
<td>Thailand</td>
<td>213</td>
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<tr>
<td>Pitcairn</td>
<td>164</td>
<td>The former Yugoslav Republic of</td>
<td>214</td>
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<td>Macedonia</td>
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<td>Poland</td>
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<td>Timor-Leste</td>
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<td>Portugal</td>
<td>166</td>
<td>Togo</td>
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<tr>
<td>Puerto Rico</td>
<td>167</td>
<td>Tokelau</td>
<td>217</td>
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</tbody>
</table>
1. How much do you know about your religion?
   1. Not at all
   2. A little bit
   3. Somewhat
   4. Most of it
   5. All of it

2. To what degree do you believe in your religion?
   1. Not at all
   2. Slightly
   3. Moderately
   4. Sincerely
   5. Strictly

3. To what degree do you practice your religion (such as attending religious meetings, practicing religious activities like saying prayers, meditation, or religious study)?
   1. Not at all
   2. Slightly
   3. Moderately
   4. Sincerely
   5. Strictly

**EXPOSURE TO GLOBAL FACTORS**

4. How often do you use the Internet?
   1. Not at all
   2. A little bit
   3. Somewhat
   4. Often
   5. Very often

5. How long have you been using the Internet?
   1. Never
   2. 1-3 years
   3. 4-6 years
   4. 7-9 years
   5. 10 years or more

6. How many people do you know who are not from your own country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6
7. How many teachers have you had who are not from your own country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

8. How many times have you traveled abroad?
   1. Never
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

9. How many of your relatives (including your parents or yourself) are married to someone from another country?
   1. None
   2. 1 or 2
   3. 3 to 4
   4. 5 to 6
   5. More than 6

**QUEST SCALE**

Please indicate the extent to which you agree or disagree with each of the items by using the following scale.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. As I grow and change, I expect my religion also to grow and change.
11. I am constantly questioning my religious beliefs.
12. It might be said that I value my religious doubts and uncertainties.
   13. I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.
14. For me, doubting is an important part of what it means to be religious.
15. I do not expect my religious convictions to change in the next few years.
   16. I find religious doubts upsetting. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
17. My life experiences have led me to rethink my religious convictions.
18. There are many religious issues on which my views are still changing.
19. God wasn’t very important to me until I began to ask questions about the meaning of my own life.
20. Questions are far more central to my religious experience than are answers.
IDENTITY DISTRESS SURVEY

Instructions: To what degree have you recently been upset, distressed, or worried over the following issues in your life?

<table>
<thead>
<tr>
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<th>2</th>
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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not at all</td>
<td>Mildly</td>
<td>Moderately</td>
<td>Severely</td>
<td>Very Severely</td>
</tr>
</tbody>
</table>

21. Long-term goals? (e.g., finding a good job, being in a romantic relationship, etc.)
22. Career choice? (e.g., deciding on a trade or profession, etc.)
23. Friendships? (e.g., experiencing a loss of friends, change in friends, etc.)
24. Sexual orientation and behavior? (e.g., feeling confused about sexual preferences, intensity of sexual needs, etc.)
25. Religion? (e.g., stopped believing, changed your belief in god/religion, etc.)
26. Values or beliefs? (e.g., feeling confused about what is right or wrong, etc.)
27. Group loyalties? (e.g., belonging to a club, school group, gang, etc.)
28. Please rate your overall level of discomfort (how bad they made you feel) about all of the above issues that might have upset or distressed you as a whole.
29. Please rate how much uncertainty over these issues as a whole has interfered with your life (for example, stopped you from doing things you wanted to do, or being happy)
30. How long (if at all) have you felt upset, distressed, or worried over these issues as a whole?
   (1) Never or less than a month
   (2) 1 to 3 months
   (4) 6 to 12 months
   (3) 3 to 6 months
   (5) More than 12 months

EIPQ

Instructions: For the following 32 statements, please decide how much you agree or disagree with each, using the following scale. Please bubble in the appropriate number on the enclosed answer sheet.

<table>
<thead>
<tr>
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<th>1</th>
<th>2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

31. I have definitely decided on the occupation I want to pursue.
32. I don’t expect to change my political principles and ideals.
33. I have considered adopting different kinds of religious beliefs.
34. There had never been a need to question my values.
35. I am very confident about which kinds of friends are best for me.
36. My ideas about men’s and women’s roles have never changed as I became older.
37. I will always vote for the same political party.
38. I have firmly held views concerning my roles in my family.
39. I have engaged in several discussions concerning behaviors involved in dating relationships.
40. I have considered different political views thoughtfully.
41. I have never questioned my views concerning what kind of friend is best for me.
42. My values are likely to change in the future.
43. When I talk to people about religion, I make sure to voice my opinion.
44. I am not sure about what type of dating relationship is best for me.
45. I have not felt the need to reflect on the importance I place on my family.
46. Regarding religion, my views are likely to change in the near future.
47. I have definite views regarding the ways in which men and women should behave.
48. I have tried to learn about different occupational fields to find the one best for me.
49. I have undergone several experiences that made me change my views on men’s and women’s roles.
50. I have re-examined many different values in order to find the ones that are best for me.
51. I think that what I look for in a friend could change in the future.
52. I have questioned what kind of date is right for me.
53. I am unlikely to alter my vocational goals.
54. I have evaluated many ways in which I fit into my family structure.
55. My ideas about men’s and women’s roles will never change.
56. I have never questioned my political beliefs.
57. I have had many experiences that led me to review the qualities that I would like my friends to have.
58. I have discussed religious matters with a number of people who believe differently than I do.
59. I am not sure that the values I hold are right for me.
60. I have never questioned my occupational aspirations.
61. The extent to which I value my family is likely to change in the future.
62. My beliefs about dating are firmly held.

BSI 18

Instructions: Below is a list of problems people sometimes have. Read each one carefully and fill in the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY.

How much were you distressed by:

<table>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>A little bit</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>

63. Faintness or dizziness
64. Feeling no interest in things
65. Nervousness or shakiness inside
66. Pains in heart or chest
67. Feeling lonely
68. Feeling tense or keyed up
69. Nausea or upset stomach
70. Feeling blue
71. Suddenly scared for no reason
72. Trouble getting your breath
73. Feelings of worthlessness
74. Spells of terror or panic
75. Numbness or tingling in parts of your body
76. Feeling hopeless about the future
77. Feeling so restless you couldn’t sit still
78. Feeling weak in parts of your body
79. Thoughts of ending your life
80. Feeling fearful
REFERENCES


Derogatis, L. R. & Fitzpatrick, M. (2004). The SCL-90-R, the Brief Symptom Inventory (BSI), and the BSI-18. In M. E. Maruish (Eds.), *The Use of Psychological Testing for Treatment Planning and Outcomes Assessment* (pp. 1-41). New York: Routledge


