

In Moving to a New Country: Children and Adolescent's Adaptation

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Master's Thesis submitted to the Faculty of the

Virginia Polytechnic Institute and State University

in partial fulfillment of the requirements for the degree of

Master of Science

in

Psychology

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December, 1996

Blacksburg, Virginia

Keywords: Children, Adjustment, Cross-cultural

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(ABSTRACT)

A primary purpose of this study was to develop and test a model of adaptation for children and adolescents who move to a foreign country. The model was developed from existing literature on adult migration, and from the small fund of knowledge which exists on immigrant children. Adaptation was conceptualized into two kinds - sociocultural and psychological. It was proposed that sociocultural adaptation would mediate the relationship between a number of independent variables (coping strategies, life events, length of stay, social support, and cultural distance) and the dependent variable, which was psychological adaptation. Use of Path analytical techniques demonstrated the poor utility of this model. There was no support for a linear relationship between psychological adaptation and sociocultural adaptation. Exploratory, data-based analyses were then carried out to determine significant predictors for sociocultural and psychological adaptation. While a significant set of predictors emerged for sociocultural adaptation, few individual significant variables emerged for psychological adaptation. Limitations of this study are noted. The implications for intervention of this finding to migrant children and adolescents are discussed.

ACKNOWLEDGEMENTS

Writing this thesis reminded me of the game I used to play years ago - “Chutes and Ladders”. There were times when I was moving along smoothly, and then times when I felt stuck. Then there were those scary moments when I came across a chute and had to slide down, with a sinking feeling in my heart! It was at these frustrating times that ladders were placed by people around me, without whose help I could not have reached the finishing point. I am very grateful to all those who provided this support. Firstly, I would like to extend a special thank you to my husband, Ajit, who made the completion of this project possible. My parents and grandparents, whose love, support and encouragement over the hundreds of miles separating us, also goaded me towards the finishing point. I would like to thank my advisor - Dr. Jones, who offered valuable suggestions all along the way, and was always there when I needed his help. And who can forget Ann Saake, Darlene Grega, Mrs. Kline, Mrs. Klaus, and Lynn Thorpe, without whose help this project would have remained in the embryonic stages! A special thanks to Monique Grannville, without whose help the statistics would have remained a mystery! Finally I would like to extend thanks to all my friends and relatives for their encouragement and support.

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INTRODUCTION

“International migrations involve strategic research events. The convergence of migration-induced transitions creates opportunities to study imposition of new adaptational requirements...and how immigrants react to such requirements. The reactions may well involve perceptual phenomenon, memory, the development of cognitions and of self, and a variety of processes structuring the life cycle” (Rogler, 1994, p. 706).

Among the first to draw attention to this phenomenon of relocation was Olberg (1955) who introduced the term culture shock to refer to the problems of acculturation and adjustment among Americans working on a health project in Brazil. Since then increasing attention has been paid by researchers to this issue. Over the years, the process of migration and crossing cultural boundaries has invited a number of studies from varying disciplines like social psychology, cultural psychology and international migration, and sociology. However, one major drawback in this field, which has concentrated its effort on adults and college students, has been the neglect of studies on children. Research in international relocation has not dealt in depth with the adjustment problems experienced by children moving from their home environment to live in a foreign society (Alston & Nieuwoudt, 1991, p. 321). Little is known about children’s experiences during the process of migration. The few studies which have focused on children’s adjustment in moving to a new country are noted below.

Sung (1985) investigated the effects of value- differences between host (i.e., the country to which

a person migrates) and home (i.e., the country of origin) cultures and its impact on children in terms of anxiety and confusion. She concluded that when a child was faced with a situation where courses of action were diametrically opposed to his/her own, the child may be immobilized and not have the maturity to evaluate or modify choices to adjust his/her values. This implies that children may lack the ability to select appropriate coping strategies in certain situations. Alston and Nieuwoudt (1991) investigated the adjustment problems of children ages 8 to 10 when they relocated from their native countries to Vienna. They found a moderate correlation between children's anxiety and adjustment to changes in material and physical environments, and between anxiety and changes in social support system. Similarly, Vercruyssen and Chandler (1992) investigated coping strategies of children (ages 12 to 18 years) and found that self-concept and behavioral adjustment were related to coping strategy employed. Specifically, they found that those who used approach strategies showed better behavioral adjustment and self-concept than those who used avoidance strategies.

While studies in the English language are few, there have been reports of studies on immigrant children in foreign-language journals. Information about them is restricted because of language limitations. Abstracts available in English are reproduced below. Sourayol, Guigon, and Avy (1981) reported four cases of North-African immigrants (aged 14 to 17 years) in France who were admitted for psychiatric evaluation and treatment. Their study reported severe identity problems of immigrant children caught between two cultures. This does not, however, reveal the extent of this problem among immigrant adolescents. Baucebi (1981) studied the mental health of Alge-

rian immigrant adults and children in France and concluded that mental trauma was divided into two main categories- those caused by changes in family status within the host country, and those related to socioeconomic differences. This suggest that life changes in certain areas may be an important factor affecting mental health if immigrant children. Bettschart (1984) suggested that immigrant children were at risk in terms of both physical and mental health because of factors like language, religion, culture, and low socioeconomic status. The information available about this precludes a deeper understanding of the influence of the identified factors on mental health. Mousaoui and Sayeli (1982) found that adolescents suffered from identity crises and mental health problems. Specifically, they found that when Maghrebian families emigrated to France, their family relationships changed drastically due to the new cultural environment, unrealistic goals, and low job status of father, among other factors. The implicit suggestion is that factors like changes in family status and changes in interactions among family members among others could affect mental health of adolescents in an adverse fashion. Two broad conclusions can be drawn from these studies. First, these studies suggest that psychological distress and sociocultural changes are both accompaniments of migration. Second, they point out that psychological distress may be affected by coping mechanisms, cultural differences and life events.

Migration involves crossing language, communication, interpersonal, social and cultural boundaries. The presence of such differences, and the fact that the immigrant has to learn to cope with the differences provides support for the possibility of development of disorders in this population. Ramirez (1989) pointed out that coping with some of the aspects of the new culture constituted

groundbreaking efforts for some immigrants, and feelings of stress, failure, and defeat were not uncommon. Several stressors present themselves to the new immigrant. The result of becoming a minority-group member in the host country, concern about relatives in the home country, fears of learning new things, and cultural conflicts may be potential sources of stress (Uba, 1994). For children, it can be hypothesized that learning the new language, adjusting to a different educational system, making new friends, fear of being rejected because of being different, learning to play new games in the host country may be possible sources of stress. Moving to a new country thus involves being exposed to potentially stressful situations for both adults and children.

Psychological distress as a reaction to stressful events in the context of migration has been alluded to in the theoretical literature. That is, although empirically validated studies are few, several authors have noted that psychological distress of varying kinds may be an accompaniment of migration. Among various psychiatric disorders, anxiety has been frequently reported in this literature. Hisama (1980) speculated about the development of anxiety disorders in children of immigrants. Specifically, he noted that the acculturation pattern of parents may differ from their children, as they might still conform to their home country's value-system. Consequently, Hisama (1980) pointed out that such parents may expect unquestioning obedience from their children, in host countries where this may not be a practice. Hisama (1980) added that there was a possibility that children may internalize such distress, and anxiety reactions may result. Huang and Ying (1989) also hypothesized about the development of anxiety disorders for children of immigrants. They noted that relocations were often stressful for children, and anxiety may ensue in the process

of attempting to cope with the new social environment. Uba (1994) noted that among South-East Asians, anxiety was one of the most common mental disorders experienced while trying to adjust to life in the USA. Some other authors (Lerner, Mirsky, & Barasch, 1994; Orley, 1994; Ekblad, Ginsburg, Jansom, & Levi, 1994) have also discussed anxiety as one of the most common disorders occurring in adults in the context of migration. Because anxiety has been reported as one of the most frequently occurring psychiatric disorders in immigrants (adults and children), it was decided to focus on anxiety in the present study.

Impetus to study anxiety in the context of migration is provided by such theoretical literature. It should be noted that while this literature is useful because it points to potential psychological disorders in need of attention, one drawback of these studies is that it fails to address the broader level issue of why certain psychological disorders may be more common than others. While the present study did not attempt to examine this issue, it can be postulated that the interaction of personality variables and the demands of the new sociocultural environment serve as a predisposing element for the development of anxiety. The other drawback of these studies concerns the fact that while they implicate anxiety as a potential psychological disorder occurring in response of migration-induced stressors, they do not suggest the specific form of anxiety. In the field of psychopathology, several cross-cultural studies carried out in the past decades have revealed that while most disorders occur all over the world, the exact form of the disorder differs between countries. That is, disorders may be expressed differently in various countries. For example, somatization has been commonly reported for psychiatric disorders like depression and anxiety in many non-Western

countries (Kleinman, 1988; Sue, 1982). Hence, for the purpose of this study it was decided to adopt a fine-grained analysis of anxiety. Specifically, various subscales, in addition to the main scores, for the measures for psychological adaptation were examined.

The foregoing review demonstrates that knowledge in the area of children's adjustment to a foreign country is not extensive. Ory, Simons, Verhulst, Leenders, and Wolters (1991) noted, "Children's coping strategies in an alien environment, risk variables and preventive factors with respect to a sojourn abroad are a neglected area in transcultural research" (p. 29). The problem is aggravated by the fact that most of the studies reported in the English language have not made use of standardized instruments, and the statistical method used, mostly correlation, does not allow for elaborate conclusions regarding the influence of relevant variables on mental health. Consequently, not many viable conclusions can be drawn from this. What they do suggest, however, is that adjustment of children moving to a new culture is an issue in need of attention.

Cultural Adaptation

A distinct feature in the literature on cultural adaptation is the use of different terms to imply the same construct, and the use of the same term to imply different constructs. Investigation of a phenomenon requires that one define the target of study. Progress of theory and knowledge is contingent upon comparison of several studies investigating a phenomenon which has been empirically defined, i.e., the same construct is used in the different studies. However, in the present case, it

is difficult to obtain collective knowledge from studies investigating cultural adaptation because of lack of consensus regarding what the term implies. Consequently, different issues are being investigated under the same rubric of cultural adaptation. Searle and Ward (1990) pointed out that a major difficulty with research on cultural contact was the lack of clarity on what constituted adjustment, and added that “the terms adaptation, acculturation, adjustment and accommodation have been used interchangeably” (p. 450). For the purpose of this study, aspects of moving to a new culture will be termed as cultural adaptation.

More recently, a number of studies have attempted to operationally define the construct of cultural adaptation (Searle & Ward, 1990; Ward & Searle, 1991; Ward & Kennedy, 1992, 1993b, 1993c, 1994; Ward, 1995). Based on a review of studies in the field of cultural adaptation, they concluded that there were two separate forms of adjustment involved in moving to new countries. Specifically, they recommended that a distinction needed to be made between psychological and sociocultural adjustment, which implied that the construct was comprised of both psychological and sociocultural dimensions. Psychological adaptation was used to refer to feelings of well-being and satisfaction. sociocultural adaptation was defined as ability to fit into the host culture and negotiate the interactive abilities involved. The major advantage of such an approach is that it enhances the outcome-specificity of studies dealing in cultural adaptation, and will hopefully allow for better communication among studies in this field.

For the present study, cultural adaptation was conceptualized in a similar way. That is, sociocul-

tural and psychological adaptation were treated as two different aspects of adaptation. A model conceptualized on the basis of this distinction was used for this study, and this is discussed below.

Conceptual Model

Ward (1995) proposed a model of the process of adaptation (Figure 1) within a stress and coping framework. Ward (1995) proposed that cultural contact was a major life event which led to stress, demanded cognitive appraisal of the situation, and cognitive, affective and behavioral responses for stress management, and required learning culture-specific skills as well. These factors, along with the outcome (outcome was clearly defined in terms of sociocultural and psychological adaptation), were presented as being affected by both society-level variables, as well as individual-level variables. Some examples of the latter included variables like length of stay, locus of control, and perceived cultural distance.

Insert Figure 1 about here

Although it offered a comprehensive view of the adaptation process, and was based upon a number of studies by the author, certain drawbacks precluded testing of the model in the present form. The model failed to distinguish between stress and skills deficit, and affective, behavioral and cognitive responses to stress. Moreover, the number of moderator variables made the model nearly

impossible to test. also, the terms predictor and moderator variables appeared to be used interchangeably, which precludes clarity. For example, earlier studies (Searle & Ward, 1990; Ward & Searle, 1991; Ward & Kennedy, 1992, 1993b, 1993c, 1994; Ward, 1995) found that the two domains of adaptation could be predicted by different variables, and these were termed predictor variables. The same variables had been termed moderator variables in the present model. Another problem with the present conceptualization was that although two aspects of the adaptation process (psychological and sociocultural) were clearly defined, the relation between them was not specified. It should be noted that across a number of studies carried out (Searle & Ward, 1990; Ward & Searle, 1991; Ward & Kennedy, 1992, 1993b, 1993c, 1994; Ward, 1995), inconsistencies were noted regarding the predictor variables involved (refer to Table 1). For example, one of the predictor variables - cultural distance, was shown to predict sociocultural adaptation in one study (Searle & Ward, 1990) and psychological adaptation in another study (Ward & Searle, 1991). This confusion could be attributable to the unknown relationship among the outcome variables. Searle and Ward (1990) urged future researchers in this field to explore the temporal difference between the two variables. They stated, "It would be important for future research to consider the exploration of the antecedent-consequent distinction between the two adjustment variables during the cross-cultural transition process" (pp. 459–460). In keeping with the problems noted above, a revised framework was used for this study, which is discussed below.

Insert Table 1 about here

Revised Framework

For the purpose of this study, as mentioned earlier, adaptation will be used to refer to the changes involved with moving to a new culture. Empirically it was defined as involving two categories - psychological and sociocultural adaptation. The present model (refer to Figure 2) attempted to study only individual-level variables thought to affect the adaptation process, as opposed to society-level variables. While Ward (1995) reported these individual-level variables as significant predictor variables for adult subjects, the present study attempted to establish the adequacy of these as significant predictors for children and adolescents as well. Only those variables consistently found in literature were studied. Predictor/Exogenous variables in the model included social support, coping strategies, life changes, cultural distance and length of stay. It was proposed that sociocultural adaptation would mediate the relation between some of the predictor variables and the dependent variable, that is anxiety. In addition, the moderating effects of age and gender were studied to determine whether these variables affected the adaptation process

Insert Figure 2 about here

Although based on Ward's two-fold categorization of adaptation, this model (Figure 2) proposed that sociocultural adaptation would precede psychological adaptation. This was done as an at-

tempt to understand the relation among the two variables. Searle and Ward (1990), Ward and Kennedy (1992, 1993b) found that sociocultural adaptation was predictive of psychological adaptation, which points out that sociocultural component may precede psychological component. Some theoretical literature provides support for this relationship. Huang and Ying (1989) noted that adjustment to the new environment may serve as a precipitating event for the development of psychological distress. Ramirez (1989), along similar lines, mentioned aspects of adjustment to a new culture such as exposure to different language and value systems may serve as potentially distressing factors. Studies looking at other cultural groups, specifically those studying African-Americans also lend support to this notion of sociocultural adaptation preceding psychological adaptation. For example, Smedly, Myers, Harrell (Prillarman), Sedanius, and King (1996) supported the notion that sociocultural adaptation preceded psychological adaptation. Using path analytical techniques, they found that sociocultural orientation had a direct influence on psychological functioning of students. Studies investigating effects of moving to other cultures on children provide indirect, though weak support for this notion. For example, Alston and Nieuwoudt (1991) as reported earlier found a moderate correlation between adjustment to changes in material and physical environments and anxiety (which can be regarded as one aspect of sociocultural adaptation). While correlation does not imply causation, it can be hypothesized that sociocultural adaptation influences psychological adaptation. As noted earlier, studies on immigrant children provide only weak support for the notion that sociocultural adaptation precedes psychological adaptation. The truth, as Searle and Ward (1990) pointed out, is that no study in this field has attempted to

study this relation. It should be noted that studies by both Sung (1985) and Alston and Nieuwoudt (1991) pointed out that there was a possibility that anxiety was an important psychological variable in the study of children who moved to new countries. However, no evidence exists regarding the specific type of anxiety response present.

Predictor, Mediator and Outcome Variables

Predictor Variables

Cultural Distance. Babiker, Cox, and M.C. (1980) proposed the notion of cultural distance to account for the stress experienced by immigrants during the process of acculturation. Cultural Distance implies perceived similarity or differences between two cultures, specifically the home culture and host culture. Babiker et al. (1980) pointed out that the notion of cultural distance was centered around an immigrant's immediate environment, as opposed to the environment in the home country as a whole, and reflected the social and physical environment. An advantage of this definition is that it allows for variability in individual experience and perception. That is, there is no preset restriction that two people who have moved from the same country and now living in the same new country have to have the same score on cultural distance. Several studies have found a relation between cultural distance and sociocultural adaptation (Searle & Ward, 1990; Ward & Kennedy, 1992, 1993b). Specifically, these studies found that it emerged as a significant predictor of sociocultural adaptation.

Life Changes. The applicability of life events literature to migration and geographic movement should be apparent (Furnham & Bochner, 1986, p. 178). Life changes is defined here as life events which the person perceives as having affected him/her in either a good or bad manner. Life changes has been found to be predictive of psychological well-being. Furnham and Bochner (1986) stated that because migration involved great number of potentially serious changes, psychological illnesses could be directly attributable to them. Studies by Searle and Ward (1990), Ward and Kennedy (1993b) have shown that life change is a significant predictor of psychological adaptation. Specifically, they found that greater number of life changes was predictive of poorer psychological adaptation, operationalized in terms of mood disturbance. In addition, migration encompasses changes in life events like changes in financial status, changes in residence, change in school and recreation and social activities. Because these changes encompass changes in sociocultural environments, it can be hypothesized that the number of changes or life events will directly affect a person's sociocultural adaptation as well.

Although the studies mentioned above have demonstrated support for the fact that greater number of life changes was predictive of poorer psychological adaptation, no attempt has for a fine-grained analysis concerning life events. That is, changes in one's life may be good or bad, and it is likely that each may affect psychological adaptation in a different way. The advantage of using this scale was that it offered two separate scores for good and bad life events. For the purpose of statistical analysis, good life events (i.e., those perceived by the individual as good) and bad life events (i.e., those perceived by the individual as bad) were considered as two separate variables in this study.

This was done to obtain a deeper understanding of the effect of each of these on the outcome variable.

Coping Strategy. Recently, coping has been re-conceptualized by Lazarus and Folkman (1984). They defined it as "consisting of cognitive and behavioral efforts to manage specific internal or external demands, and conflicts between them, that are appraised as taxing or exceeding the resources of the person". They identified two broad categories of coping-problem focused coping and emotion focused coping. The former is thought to change the actual relationship, and in a sense, is action-centered. The latter changes only the way in which the relationship is attended to, and has to do with internal restructuring. For the purpose of analysis, these were considered as two separate variables.

Studies have shown that there appears to be a fit between kind of coping response (i.e., problem-focused or emotion- focused), and adaptivity in different situations. This view suggests that problem-focused coping is adaptive in controllable situations, while emotion-focused coping is adaptive in uncontrollable situations. Verduyck and Chandler (1992) found that those who used approach strategies exhibited better behavioral adjustment than those who used avoidance strategies. Anderson (1994) conceptualized adaptation as the outcome of response generation (which can be viewed as coping). While this model does not suggest coping being related to any one aspect of adaptation, it can be hypothesized that coping strategy will affect children's sociocultural adaptation. Choosing a problem-solving approach may facilitate sociocultural adaptation in a foreign

cultural context, while adoption of emotion-focused coping may impede adjustment to the environment.

Social Support. Migration involves leaving behind one's old friends and family, and one's social supports are reduced. It is likely that greater interaction and support from both host and home country nationals will help in sociocultural adaptation. For example, Ward and Kennedy (1993a) found that interaction with host and home country nationals was predictive of greater sociocultural adaptation. This suggests that the quantity (i.e., number) and quality (i.e., whether the person gets the support from host or home nationals) are both important aspects of study. Social support has also been linked directly to psychological adaptation. (Alston & Nieuwoudt, 1991) found a moderate correlation between anxiety and social support system, suggesting that social support influences psychological adaptation. Recognizing the possible differential effects of these on outcome, these were considered as separate variables for the purpose of statistical analysis.

Length of Stay. Ward (1995) found that sociocultural adaptations may follow varying curves of adaptation with respect to time. Specifically, sociocultural adaptation followed a learning curve, with problems decreasing over time. The relation between length of stay and sociocultural adaptation is also indirectly borne out by inconsistent findings between length of stay and psychological adaptation, suggesting that a mediating factor may be involved.

Mediator Variable

Sociocultural Adaptation. Ward (1995) refers to this as the outcome involving behavioral competence. This reflects the extent to which a newcomer has "fit into" the new culture, and includes adaptation to social and cultural aspects of the host culture. Searle and Ward (1990), Ward and Kennedy (1992, 1993b) found that sociocultural adaptation was predictive of psychological adaptation, which points out that sociocultural component may precede psychological component. As pointed out earlier, evidence in the literature, though not definitive, is vaguely indicative of this relationship.

Dependent Variable

Child's Psychological Adaptation. Studies investigating adaptation of children have noted that anxiety is a common response which occurs in the contest of a new, or the host, environment (Alston & Nieuwoudt, 1991; Sung, 1985). For the purpose of the present study, anxiety will be considered as the dependent variable.

Hypothesis

A number of direct and indirect effects based upon the proposed model were hypothesized. Direct effects included:

1. Number of life events or changes will directly affect both psychological adaptation and socio-cultural adaptation.
2. Social Support will directly influence both psychological and sociocultural adaptation.
3. Cultural distance will directly affect sociocultural adaptation.
4. Length of stay will directly affect sociocultural adaptation.
5. Coping strategies will directly affect sociocultural adaptation.

Indirect effects included:

1. Cultural distance will indirectly affect psychological adaptation.
2. Length of stay will indirectly affect psychological adaptation
3. Coping strategies will indirectly affect psychological adaptation.

METHOD

Pilot Study

A pilot study involving 10 children was carried out to assess the reliability and validity of three of the measures used in the study. Specifically, children were administered the Cultural Distance Scale, Sociocultural Adjustment scale, and the Coping Questionnaire. The first two had been used with adults, so it was deemed necessary to assess the reliability for children. The third was developed for the purpose of this study, so the reliability needed to be established.

Ten children were interviewed by the principal investigator for the pilot study. They were recruited from the YMCA group for international women, and from Cranwell International Center. Only one subject was in need of a translator, and a person not known to the child was made available. At this time, the primary investigator was also present. The interviews were held at the Cranwell International Center. All subjects were given a Burger King coupon as an incentive for participating in the study.

The sample consisted of ten children. Ages of the children varied from 7.5 years to 14 years. Regarding gender, the sample was equally divided into five girls and five boys. The mean age was 10.5. The number of months of stay in USA ranged from 2 to 60 months (0.17 to 5 years). The mean length of stay was 22.9 months (1.94 years). Relevant sample demographics are presented in Table 2.

Insert Table 2 about here

Reliability analysis was conducted for three scales - The Cultural Distance Scale, Coping Questionnaire and the Sociocultural Adjustment Scale (Modified). Searle and Ward (1990) reported Cronbach's Alpha of 0.79 for the Sociocultural Adjustment Scale. However, certain items from this scale were deleted since they may not have been appropriate for children. The modified scale consisted of 18 items. The reliability of this was assessed during the pilot interview.

For each of the three scales administered at this time, i.e., the Sociocultural Adjustment Scale (Modified), Cultural Distance Scale, and the Coping Questionnaire, reliability analysis was conducted. For the first two scales, Cronbach's Alpha and Split-Half reliability estimates were calculated. For the third scale, test-retest reliability was obtained.

Cronbach's alpha for the Cultural Distance scale from the Pilot study was found to be 0.7245. For this scale, split-half reliability was found to be 0.7218. This indicated that the measure could be used for children. For the modified Sociocultural Adjustment Scale, Cronbach's alpha was found to be 0.6833, while Split-half reliability for this scale was found to be 0.7466. It was found that removal of one item-item increased the Cronbach's Alpha value to 0.7390. Hence, this item was dropped from the questionnaire. Split half reliability for this measure with the item deleted was found to be 0.7772. For the Coping Questionnaire, test-retest reliability was obtained. This was

found to be 0.9128, indicating the viability of this measure for use with this sample. Cronbach's alpha for this scale could not be computed because of few responses in each category. The results from the pilot study thus suggested that the scales could be used reliably for this sample.

Main Study

The sample population consisted of 80 children and adolescents (from ages 7.5–17) recruited from the school system in the Blacksburg area. It had been initially proposed that only children between 8 years and 15 years would be studied on the assumption that the required number of children would be available from this age-group. However because of difficulty in obtaining subjects, the original age-range was slightly widened.

The criteria for inclusion consisted of those families who have moved to Blacksburg in the last five years, and also those who have been in the United States for five, or less than five years. Because of lack of subjects, this range was widened to include subjects who had stayed more than five years, upto approximately eight years. Participation was voluntary. Subjects were recruited through four different means: the school system; through English as a Second Language classes in the schools system; as newcomers are often enrolled here; from the Cranwell International Center; and from an international women's group run by the YMCA. Confidentiality was assured to the subjects. Both subjects and parents of subjects were required to read and sign the assent forms and informed consent forms respectively (Refer to Appendix A and B respectively), which described

the purpose of the study.

Procedures

All interviews were conducted by the principal investigator of the study. The time of administration varied from twenty minutes to forty minutes. Some interviews were conducted in the schools, while others were conducted in the Cranwell International Center. Specifically, for those children identified by the school as being proficient in English, the interviews were conducted at the Cranwell Center. These were done on an individual basis. The investigator read out all instructions to the subject. At the time the child filled out the questionnaires, one parent of the child filled out the Child Behavior Checklist (Parent version). For children not proficient in English, the interviews were conducted in the English as a Second Language (ESL) class, and the teacher concerned was also present to assist the children. In the elementary schools the interviews were done on an individual basis. In the middle school and high school, the principal investigator administered the questionnaires in groups, during their ESL classes, and in the presence of the ESL teacher. All instructions were read aloud by the investigator, and both the investigator and the teachers were present to answer any questions which arose. A translator was needed for one subject, and in this case a person not known to the subject was made available as a translator. At this time, the principal investigator was also present. Regarding the children who were interviewed in the schools, the CBCL was sent home for either one parent to fill out. Each subject was given a Burger king coupon as an incentive for participating in the study.

Measures

Since none of the scales had previously been used with this sample, reliability analysis for all of the six measures used in this study was carried out. Table 3 presents the Cronbach's Alpha values for each of the scales and subscales.

Insert Table 3 about here

1. Cultural Distance Scale. This is based on the one originally developed by Babiker et al. (1980), but later revised by Ward and Searle (1991). Subjects are asked to rate on a five-point scale the extent to which the differences between their own backgrounds and their experiences in the host country exist. The scale (Please refer to Appendix C) surveys ten areas, specifically, food, climate, clothing, educational system, language, religion, material comfort, recreational activities, family structure, and forming friendships. Scores range from 0 to 48, with higher scores indicating greater perceived difference. The reported reliability estimates based on Cronbach's Alpha between 0.79 and 0.85 in various studies conducted by them. The reliability index for this was assessed during the pilot interview.

Alpha estimate for Cultural Distance Scale was found to be 0.700 in this study.

2. The Life Events Checklist (Modified). The original scale was developed by Johnson and McCutcheon (1980). It consists of 46 events along with spaces for respondents to report events not specifically listed. Items were selected by considering items from the Coddington scale, the adult life changes scale (which were considered appropriate for use with children in the modified form), and by including items the authors found to be frequently experienced by children and adolescents. The scale taps a range of events likely to be experienced by young children. The first 18 events include those over which the child has little personal control, while items 19 to 46 reflect events that are likely to serve as stressors when experienced, but these are viewed as under the control of the individual. The checklist yields two values - a positive life change score, and a negative life change score. A total life change score can also be obtained by summing the impact ratings of all events experienced. Test-Retest reliability estimates of 0.69 and 0.72 were reported for the positive and negative life change units respectively. For the purpose of this study, 18 items were dropped because they were not considered as appropriate for these children. The modified scale (Appendix D) consisted of 28 items.

The reliability estimate for the modified Life Events Checklist could not be obtained because of the nature of the questionnaire. That is, there were not enough responses in each category to compute Cronbach's Alpha. It is recommended that future studies using this scale should either have a very large sample size, or use test-retest reliability analysis.

3. Coping Questionnaire for children. This scale (Appendix E) has been specially devised for the purpose of this study. It includes ten areas which require changes during the process of migration. These areas were specified by Ward (1995) and Furnham and Bochner (1986) as potential areas requiring adjustment when a person migrates. Children will be asked to select from various alternatives what they did to cope in that area. The alternatives included both problem and emotion focused responses which a child may engage in. The number of responses were coded in two dimensions - problem and emotion focused responses.

In the main study Cronbach's Alpha for the Coping Questionnaire was 0.734. For the problem-focused and emotion-focused sub-scales, Cronbach's Alpha was found to be 0.845, and 0.600 respectively.

Because the Coping Questionnaire was a newly developed scale, it was thought appropriate to carry out a factor analysis for a more in-depth investigation of this scale. The results are presented in Table 4. Overall, the items accounted for 83% of the variance in the scale, which suggests that this may be a useful measure for use with this population. The problem-focused responses loaded onto one factor, accounting for 37% of the variance, indicating the homogeneity of this subscale. However, the emotion-focused subscales loaded on three different factors. It should be noted that the factors represent quantity of responses. Because of this, the conclusion it allows is that the number of emotion-focused responses for three items in the scale were similar (these items were related to dealing with different weather conditions, different kind of school, and ways of making

friends), since they loaded onto one factor while emotion-focused responses for two other items (learning a different language and praying in a different way) each loaded onto a different factor. The latter finding indicates that the number of responses used to deal with each of the areas was different. However, since individual responses were not coded, the nature of these factors could not be ascertained. Overall, the responses indicate that children used different number of emotion-focused responses for various items, but used similar number of problem-focused responses for all items.

Insert Table 4 about here

4. Children's Sociocultural Adjustment Scale (Modified). This was developed by Searle and Ward (1990) for use with adults who migrate. It focuses on the skills that are required to cope with everyday social situations in a new culture. Unlike the original measure developed by Furnham and Bochner (1986), the reference points for social difficulty were not framed in affective terms. The original scale consisted of 23 items concerning areas in which immigrants might experience difficulty in, for example, making friends, going shopping, making oneself understood, and relating to members of the opposite sex. Subjects are requested to rate these items on a 5-point scale, ranging from no difficulty to extreme difficulty.

As mentioned earlier, some items were dropped from this questionnaire, and a final 18-item ques-

tionnaire was administered during the pilot study. After the pilot study, one additional item was dropped. The final scale (refer to Appendix F) used in the main study consisted of 17 items.

For this Sociocultural Adjustment Scale (Modified), Cronbach's Alpha was found to be 0.730 for the main study.

5. Social Support Questionnaire 6 (SSQ6). This was devised by Sarason, Sarason, Shearin, and Pierce (1987). It is a six -item self-report questionnaire (Refer to Appendix G) designed to measure the number and quality of social supports. The SSQ6 is a shortened version of the SSQ (Social; Support Questionnaire) which is comprised of 27 items. The SSQ6 was found to be highly correlated with the SSQ (Sarason et al., 1987). Sarason et al. (1987) point out that the internal reliability of the SSQ6 is greater than that of the SSQ, implying that it might be a better scale than the SSQ. Reported alpha coefficients for the SSQ range from 0.90 to 0.92. Two kinds of scores -number of social support, as well as satisfaction with social support can be obtained from the SSQ6. Both the number and quality of social support scales were found to be reliable obtaining Cronbach's alpha of 0.90 and 0.69 respectively.

For the SSQ-6, Cronbach's Alpha was found to be 0.763. For the individual subscales of quantity and quality of social support, Cronbach's Alpha was found to be 0.693 and 0.620 respectively.

It can be seen that the quality of social support subscale demonstrated lower reliability than the quantity of social support subscale. It should be noted that this discrepancy was also noted in the

original reports from the authors of this scale (Sarason, Sarason, Shearin, & Pierce, 1987). In this study, one reason for the lower reliability of the quality subscale can be indirectly inferred. It was the interviewer's experience that some children had difficulty in reporting a single value of satisfaction for all the people they listed (this is in keeping with the nature of the scale), and the lower reliability obtained could be a reflection of this difficulty.

6. Revised Children's Manifest Anxiety Scale (RCMAS). This scale (Refer to Appendix H) was used as a measure of psychological adaptation for children. It is a 37-item self-report scale of anxiety devised by Reynolds and Richmond (1978), for use with 6 to 19 year old children. Scores on three subscales physiological symptoms, worry/oversensitivity and concentration as well as a total score and a nine item lie scale can be calculated. Total scores range from 0 to 28. Test-retest reliability was reported to be 0.82 (Reynolds & Richmond, 1978). The three subscales can be used to determine the particular nature of a child's anxiety. Physiological anxiety reflects the child's expression of physical manifestations of anxiety. The worry subscale is an index of the child's sensitivity to environmental pressures. Concentration anxiety is related to a child's concerns of not being able to live up to the expectations of significant others (Reynolds & Richmond, 1994).

In the main study Alpha estimates for the RCMAS (total score) was found to be 0.7497. Estimates for the total subscale scores were found to be 0.746, 0.685 and 0.554 for worry, concentration and physiological anxiety respectively.

7. Child Behavior Checklist Parent version (CBCL-P). This scale (Achenbach & Edelbrock, 1983) was developed to systematically assess behavioral problems in children. It consists of 118 items to which parents respond using a three-point scale, consisting of the following options: ‘not true’, ‘sometimes true’ and ‘very true’. Besides yielding a total scale score, which indicates the incidence of behavioral problems, the items are organized into two broad-band factors - internalizing and externalizing problems. The former refer to overcontrolled problems, while the latter refer to undercontrolled problems. Reliability and validity estimates of this scale have been well-established. Test-Retest Kappa of 0.99 has been reported for the competence scales, and of 0.95 for the problems scales.

For the Child Behavior Checklist - Parent version, Cronbach’s Alpha was found to be 0.933. It should be noted that this estimate was based on only 44 responses, as many of the parents had circled the ‘not true’ category for some items. It is necessary to keep this in mind, and there is a chance that the high Alpha coefficient obtained was attributable to this response-style.

Data Analyses

Data analysis was carried out in several stages for the main study. First, descriptive statistics, including tests of normality were performed on all the variables. Second, reliability analysis was carried out for each of the scales used in the study. The results from this analysis were reported earlier with the information on measures. In addition, factor analysis was carried out for the newly

developed scale - Coping Questionnaire. Third, Latent Structural Equation Modeling using the statistical program LISREL-8 was carried out to test the proposed model. Specifically, the variables of cultural distance, life changes, coping, social support, and length of stay were considered as exogenous manifest variables in the model, while sociocultural adaptation and anxiety were considered as endogenous manifest variables in the model. The results from LISREL-8 were inconclusive. Specifically, the iterations did not converge. One reason for this is that the model being tested may not be appropriate for the target population.

On account of these results, an exploratory approach was adopted, which consisted of the following steps. First, the proposed model was tested using an alternate strategy which was path analysis. The results from this indicated that sociocultural adaptation and psychological adaptation were not linearly related. Hence, these were treated as separate dependent variables. Second, because the results from path analysis revealed significant predictor variables for sociocultural adaptation, an attempt was made to determine the best set of predictors for sociocultural adaptation. That is, theory-trimming using the results from the path analysis was done. The relationship of the final set of predictors to sociocultural adaptation was then tested using LISREL-8. This was the third step. Fourth, since moderating effects of age and gender had been proposed for the original model, this was done for the final model which emerged for sociocultural adaptation. The Moderated Regression Strategy (Stone, Eugene, & Anderson, 1994) was used. The fifth step focused on psychological adaptation. Because the path analysis based on the proposed model failed to reveal any significant predictors, step-wise regression strategy to determine the presence of any

significant predictor variables among all of the variables used in the study was done. Separate stepwise regression was used for seven dependent variables - total score from RCMAS, three individual subscale scores of RCMAS (i.e., worry, concentration and physiological anxiety), total score from CBCL-P (Standardized score), and scores from two CBCL-P subscales (i.e., externalizing and internalizing). The reasons for the use of separate subscales in the analyses were mentioned in the previous chapter. Specifically, this was done keeping in mind the findings from cross-cultural studies, which have revealed that different cultural groups may have different ways to express symptomatology.

RESULTS

Demographics and Sample Characteristics

The sample consisted of 47 males and 33 females. Ages of the subjects varied from 7.5 years to 18 years. Twenty-two countries were represented in this study. These included China, India, Republic of Korea, Egypt, Ghana, Mongolia, Taiwan, Spain, Venezuela, Iran, Sri Lanka, Hungary, Switzerland, Germany, Malaysia, Argentina, Russia, Kuwait, Albania, Japan, Bulgaria and South Africa. The country of origin of one child was not known. The largest proportion of children were from China (18 children). Table 5 presents a list of the number of children and adolescents from various continents around the globe. The age and gender distribution of this sample is noted in Table 6.

Insert Table 5 about here

Insert Table 6 about here

Regarding the variables under study, the mean and standard deviations of the variables are included in Table 7. With regard to the dependent variables, a comparison of the mean scores ob-

tained by the present sample and that of the standardization samples for each of the two scales is presented in Table 8. It should be noted that the mean scores of the present sample were lower than those of the standardization samples for both the scales. Possible reasons for this are discussed in the following chapter.

Insert Table 7 about here

Insert Table 8 about here

Testing Assumptions of Normality

The chi-square test, which is used as an index to test the validity of the proposed model in LISREL-8, assumes normality of data. Hence, it was considered appropriate to test the normality assumptions for each of the variables. Statistical analysis revealed that certain variables needed to be transformed. Specifically, the variables of length of stay, sociocultural adaptation and concentration (subscale of RCMAS) were transformed. Appropriate transformations were carried out.

Correlations

As a precursor to the use of LISREL, Pearson's moment correlations using Bonferroni correction were conducted with all of the variables. Since both total scale-scores and subscale scores were used in differing analysis, correlations were conducted for each set of variables used in each analysis. For simplification purposes, the correlations are all presented in one table. In each set, 12 variables were used, hence the significant p-value after Bonferroni correction was 0.0042. Table 9 presents the correlation matrix. Significant relationships after the Bonferroni correction was applied are noted below. Sociocultural adaptation was correlated with cultural distance ($r = 0.370$, $p \leq 0.004$). Total anxiety (RCMAS) was found to be related to emotion-focused coping ($r = 0.3222$, $p \leq 0.004$). Concentration was found to be related to emotion-focused coping ($r = 0.328$, $p \leq 0.004$). Some correlations which were significant before, but not after, the application of the Bonferroni correction are as follows. With regard to the RCMAS, total anxiety was found to be related to bad life events ($r = 0.2563$, $p \leq 0.05$); scores on the worry subscale were found to be related to problem-focused coping ($r = 0.2408$, $p \leq 0.05$) and emotion-focused coping ($r = 0.2983$, $p \leq 0.05$); while scores on the concentration subscale of the RCMAS were found to be related with bad life events ($r = 0.2500$, $p \leq 0.05$) and sociocultural adaptation ($r = 0.2264$, $p \leq 0.05$). Regarding CBCL-Parent version, the total score was found to be related with bad life events ($r = 0.2417$, $p \leq 0.05$); while the subscales of internalizing and externalizing were found to be related with emotion-focused coping ($r = 0.2579$, $p \leq 0.05$) and cultural distance ($r = 0.2309$, $p \leq 0.05$) respectively.

Insert Table 9 about here

Path Analysis

Whole Model

Because of the inconclusive results from LISREL-8, path analysis was carried out to test the applicability of the proposed model. Two path analysis were run, the only difference being the dependent variable used. In the first run, the total score from the RCMAS was used as the dependent variable. In the second run, the CBCL-P standardized total score was used. The results when RCMAS was used as the dependent variable are noted in Table 10. It can be seen that overall the variables were not significant predictors of total anxiety score of the RCMAS ($F(5, 74) = 1.634, p = 0.1613$). The variables accounted for only 10% of the variance in psychological adaptation. The only individual significant predictor was bad life events (Beta = 0.283, $p = 0.02$). However, as the overall result was statistically non-significant, this finding needs to be interpreted with caution.

Insert Table 10 about here

Furthermore, the results did not support a causal linear relationship between sociocultural adap-

tation and psychological adaptation, as originally proposed.

When the standardized score from the CBCL-P was used as the dependent variable, a similar pattern was observed (Table 11). That is, although the variables accounted for 6% of the variance in CBCL-P scores, the relationship was non-significant ($F(5, 74) = 0.9877, p = 0.4311$). One individual variable - bad life events, barely reached significance ($Beta = 0.232, p = 0.056$), which precludes its inclusion as a significant independent predictor.

Insert Table 11 about here

With respect to the hypothesis, these results indicated that the following direct and indirect effects proposed were not supported:

1. Sociocultural adaptation did not directly influence psychological adaptation.
2. Number of life events or changes did not directly affect psychological adaptation.
3. Social Support did not directly influence psychological adaptation.
4. Cultural distance was not found to indirectly affect psychological adaptation.
5. Length of stay did not indirectly affect psychological adaptation
6. Overall, coping did not indirectly affect psychological adaptation.

The results from this indicated that the data did not support the proposed model. However, it also indicated that although the overall model was insignificant, one part of the model - the relationship

between the independent variables and sociocultural adaptation was significant. This is discussed in the next section.

SocioCultural Adaptation

One finding from the path analysis (refer to Table 10) was that the variables used were significant predictors of Sociocultural adaptation ($F(8, 71) = 4.085, p = 0.0005$). R square for this part of the model was 0.320. However, not all variables emerged as significant predictors. Problem-focused coping ($p = 0.84$), good life events ($p = 0.43$) and bad life events ($p = 0.95$) were not significant predictors. On account of this, a data-driven exploratory approach was adopted to find the best set of significant predictors. The non-significant variables were dropped one at a time, and path analysis was re-run at each stage. The final model (refer to Table 12) consisted of five independent variables- cultural distance, length of stay, quality and quantity of social support, and emotion-focused coping. The independent variables in the final model accounted for 31% of the variance in Sociocultural adaptation ($F(5, 74) = 6.6214, p = 0.000; R \text{ square} = 0.3091$). In order to compare the relative utility of the partial-model as compared to the whole model, F-test was carried out ($F_{\text{observed}} = 0.2107, F(3, 71) = 2.76$). This result indicated that the partial model was as good as the whole model in explaining sociocultural adaptation. Hence, the partial model was a more efficient model.

Insert Table 12 about here

With respect to the proposed hypothesis, the following direct effects were supported:

1. Cultural distance was found to directly affect sociocultural adaptation.
2. Length of stay was found to directly affect sociocultural adaptation.
3. Emotion-focused coping was found to directly affect sociocultural adaptation.
4. Quantity and quality of social support were found to directly affect sociocultural adaptation.

LISREL-8 was used as an additional test to determine adequacy of the variables as significant predictors. The purpose of using LISREL was merely to test the adequacy of the entire model. Table 13 presents the findings from the LISREL solution with respect to the indices assessing the overall fit of the model to the data. Chi square for the model with 38 degrees of freedom was found to be 52.6 ($p = 0.058$). The non-significant p-value indicates that the model fitted the data well. In addition, the low chi-square to degrees of freedom ratio is considered an indicator of a good model (Joreskog & Sorbom, 1988). The Goodness of Fit (GFI) for the model was found to be 0.91, while Adjusted Goodness of Fit (AGFI) was found to be 0.82. Total effects (Direct effects) are noted in Figure 3.

Insert Table 13 about here

Insert Figure 3 about here

With regard to the initial proposed model, it had been proposed that moderating effects of age and gender would be analyzed. Since the original model was found to be invalid, the moderating effects of age and gender were done on the final model of sociocultural adaptation. The Moderated Regression Strategy was used. No moderating effect of gender was found. Age was found to significantly moderate the relationship between emotion-focused coping and sociocultural adaptation (Beta = 0.6517, $p = 0.03$). When the moderating effect of age on emotion-focused coping was entered in the model, the total variance accounted for increased to 0.35 ($p = 0.000$, $F = 6.37$; $R^2 = 0.3468$).

Psychological Adaptation

Stepwise regression analyses using all of the independent variables were carried out to determine if any predictors for anxiety could be identified. It should be noted that 7 dependent variables were used separately. These were: total anxiety score from RCMAS, scores from the individual subscales of worry, concentration, and physiological anxiety, standardized T-score from CBCL-P, and standardized T-scores for the internalizing and externalizing scales of the CBCL-P. Table 14 lists the significant variables found in each case.

Insert Table 14 about here

Emotion-focused coping and bad life events were found to predict total anxiety score from the RC-MAS ($F(1, 76) = 8.2903, p = 0.0006; R \text{ square} = 0.1851$). Emotion-focused coping and problem-focused coping were found to be significantly predictive for worry ($F(1, 76) = 6.765, p = 0.002; R \text{ square} = 0.1528$). Emotion-focused coping emerged as the only significant predictor for concentration ($F(1, 75) = 8.5277, p = 0.0046; R \text{ square} = 0.1021$). None of the variables used in this study were found to predict physiological anxiety score. For the total score of the CBCL-P, bad life events was found to be a significant predictor ($F(1, 72) = 4.47, p = 0.038; R \text{ square} = 0.06$). Emotion-focused coping was found to predict internalizing problems, ($F(1, 72) = 6.05, p = 0.02; R \text{ square} = 0.08$) while cultural distance was found to predict externalizing problems ($F(1, 72) = 4.25, p = 0.04; R \text{ square} = 0.05$).

DISCUSSION

The primary purpose of this study was to test a model of psychological adaptation for children. Specifically, it had been proposed that sociocultural adaptation would mediate the relationship between the various independent variables and the dependent variable which was psychological adaptation.

The results, both the inconclusive results from LISREL as well as the result obtained from path analysis, did not support the model. Several reasons can be hypothesized for this finding, some of which are enumerated below.

Firstly, it is likely that factors which operate for other groups (adults or other cultural groups) may not operate in the same way for children and adolescents. This is indicative of the need to recognize that although the major event - moving to a new country, may be the same for adults and children, children may undergo different experiences as compared to adults. Consequently children and adolescent's adjustment may not follow the same pattern as adults.

A second reason for this could be attributable to the nature of the dependent variable selected. Many of the studies on adults (Ward & Kennedy, 1992, 1993b) used depression as the dependent variable, while this study used anxiety. It is possible that sociocultural adaptation affects depressive symptoms, but not anxious symptoms.

A third possible explanation for this finding is the fact that psychological adaptation may not be

a factor of importance for children. They may not perceive it as a stressful event, and they may be happy about coming to the United States. Unlike adults, they may not have to leave behind a number of close friends or a very familiar environment where they have spent a number of years, as compared to adults. It is likely that their emotional involvement in their home country may be less compared to adults. Recently Nathanson and Marcenko (1995) found that adolescents who relocated to Japan appeared to fare well and reported high levels of satisfaction, which supports the notion that children may not experience negative psychological repercussions.

A fourth reason for the lack of linear relationship found between sociocultural adjustment and anxiety could be that the measures used for psychological adaptation may not have been sensitive for this population. The scales measuring psychological adjustment may not have tapped into cultural ways of expressing distress, leading to the insignificant findings relating to psychological adjustment. This is related to what Kleinman (1988) termed 'categorical fallacy'. Kleinman (1988) pointed out that different cultural groups may have differing ways to express symptoms. In addition, what is considered distressful in different cultures may differ. Hence, it is not ideal to use measures of specific psychopathological symptoms (for example anxiety) on other cultural groups without ascertaining the meaning of anxiety for those groups. The implication of this to studies with children is to first explore local idioms of distress and anxiety used by international children. These could be developed into items in a questionnaire for use with this population. Consequently, in this study it is not known to what extent the items in most of the scales were concordant with locally accepted ways to express distress.

Finally, it can be speculated that a reason for not finding a significant relationship between socio-cultural adaptation and psychological adaptation was related to the respondent's unwillingness to disclose psychological distress. It may be likely that children are taught not to report or disclose psychological feelings to anyone, hence they failed to report distressing symptoms. One finding which lends partial support to this speculation is that the raw scores obtained by these children ranged from 0 to 22, while those from the normative sample ranged from 0 to 28. Examination of Table 8 also reflects the possibility that these children may have underreported symptoms. Specifically, the mean scores obtained by the children in this sample were lower than those in the standardization sample. In the case of the parents, a similar conclusion can be hypothesized, based on the findings from the responses to the CBCL-P. The mean T-score the parents of this sample obtained was 44.64, while that of the standardization sample was 50 (refer to Table 8). One of the many reasons for parents reporting such low scores, besides the reasons discussed in the previous paragraphs, could be that parents, either knowingly or unknowingly, did not disclose problem-behaviors in children. While voluntary non-disclosure may be related to an unwillingness to report psychological problems to outsiders, involuntary non-disclosure may have resulted because of lack of knowledge on the part of the parents regarding problem-behavior. Specifically, it can be speculated that the fathers of the children, and not mothers, filled out the questionnaires. This speculation rests on the assumption that many of the fathers were students at Virginia Tech, while the mothers were homemakers. Because of their greater familiarity with the English language, the questionnaire may have been filled out by the fathers. In relation to this, it is likely that fathers

may not have been aware of the problems in their children.

While the main model was not supported, several interesting findings resulted from subsequent exploratory analyses.

Sociocultural Adaptation of Immigrant Children

Moving to a new country exposes many children to a sociocultural milieu different from their home countries. The results from this study suggest that children who move to another country do experience the task of adjusting to a number of areas related to the sociocultural environment. The child is faced with the task of learning to deal with the new environment in a number of areas, for example, adjusting to different climatic conditions, patterns of eating and dressing, ways of talking to people and interacting with friends. The extent of sociocultural adjustment reported was dependent upon a number of factors: the difference between the home and host cultures, quality and quantity of social support and emotion-focused coping. Each of these factors will be discussed below.

Better adjustment was predicted by lesser cultural distance, greater length of stay, lesser use of emotion- focused responses, and higher quantity of social support. This suggests that children from cultures very different from USA may be at higher risk for difficulties in dealing with the sociocultural environment. Earlier studies by Searle and Ward (1990) and Ward and Searle (1991) have also found that greater cultural distance was related to greater difficulties in sociocultural

adjustment. The finding that length of stay is related to sociocultural adjustment suggests that children who have stayed in USA for a longer time adjust better to aspects of the sociocultural adjustment, a finding which implies that many children do learn to adjust better with time. The relation of length of stay and sociocultural adjustment has also been found in some adult studies (Ward & Kennedy, 1993a). Sociocultural adaptation may be facilitated by use of lesser number of emotion-focused responses. Adjusting to a new environment entails learning new skills - for example, different ways of communicating with people, making new friends, and willingness to try new food. It is evident that adaptive responses to such tasks should involve more active coping styles, as compared to passive styles like crying or ignoring the situation. However, although the study supported the expected relationship between emotion-focused coping and adaptation, it failed to reveal problem-focused coping as a significant predictor of adaptation. It is likely that this is related to the nature of the scale used. Specifically, the scale measured the number of problem-focused responses, and it is likely that it is not the quantity that is important, but the kind of strategy used. It is suggested that future studies should examine the use of specific strategies used by these children. With respect to emotion-focused coping, age was found to moderate the relationship between emotion-focused coping and sociocultural adaptation. The finding that age was a moderating variable merely suggests that the age affects the relationship between emotion-focused coping and sociocultural adaptation. Examination of the correlation table helps further interpretation (though weak) of this result. Specifically, the correlation between emotion-focused coping and age was negative ($r = -0.0130$, $p = 0.910$). Although statistically insignificant, this re-

lation suggests the possibility of older children using less emotion-focused strategies to deal with aspects of moving to a new country. It can be hypothesized that older children may be able to evaluate the relative effectiveness of coping strategies, and choose what they think as adaptive.

Another finding which was contrary to expected results was the relationship between quality of social support and sociocultural adaptation. It was found that greater reported satisfaction of social support was related to more difficulties in adjusting to the environment. Three reasons are offered for this finding. The first is related to the kind of people the children reported. It may be possible that children reported social supports from their home country, and family-members who have also moved from a foreign country may not be helpful in helping the child to negotiate aspects of the new social environment. Similarly, Ward and Kennedy (1993a) found that for adults who migrated, quality of social support with host nationals, as opposed to co-nationals, was predictive of greater sociocultural adjustment. Searle and Ward (1990) found that satisfaction with host nationals was predictive of greater sociocultural adjustment. Hence, it is likely that satisfaction of social support received from home-country nationals may not be related to better sociocultural adjustment. With respect to this possibility, it should be noted that there was a positive correlation between the two subscales ($R = 0.5410$, $p = 0.000$). When viewed with the explanation offered earlier, this suggests two possibilities. The first is that the explanation offered for the inverse relationship between quality of support and sociocultural adaptation may not be tenable, since one interpretation of the correlation is that children who reported greater number of social supports were also more satisfied with the support. The second implication is that the observed

correlation may be attributable to some unknown third factor. For example, it can be speculated that children who are more satisfied in their relationships were able to report greater number of social supports, while those who are less satisfied could not report names of many people in their lives. If the correlation observed is attributable to this, then the earlier explanation still holds.

The second reason for the relationship between quality and sociocultural adaptation may be related to the moderate reliability obtained for this subscale of social support. It may be possible that the children had difficulty in reporting quality of social support (Satisfaction). This is partly supported from the interviewer's experiences as noted earlier. It was sometimes found that children wanted to express different satisfaction levels for each person they listed, but the scale requests the respondent to choose one value for all of the people listed. Some children may have experienced difficulty in doing this, and this may explain the moderate reliability for this subscale, as compared to the higher reliability for the quantity-subscale.

A third reason for the relationship found between quality of social support and sociocultural adaptation may be the correlation observed between number and quality subscales. Mason and Perreault (1991) have pointed out that although colinearity may not affect overall prediction, it may lead to unexpected directions in size of regression coefficients. Hence, the direction of regression coefficient found needs to be interpreted with caution.

Psychological Adjustment

The results from Stepwise Multiple Regression demonstrated that children's responses on the RCMAS score (total score) were significantly predicted by emotion-focused coping and bad life events. It was found that higher the bad life events, and greater the number of emotion-focused coping strategies used, the greater was the number of total anxiety symptoms endorsed by the children. The relation between emotion- focused coping and anxiety has been borne out in a number of studies. For example, Olah (1995), in a cross-cultural study on coping strategies, found that higher reported anxiety was related to greater use of emotion-focused coping in all children. The obtained relation between anxiety and bad life events supports other studies investigating this relationship. For example, Hoffman, Levy, and Ushpiz (1993) found that anxiety was related to stressful life events in Israeli boys. The relation between bad life events and psychological adjustment is also supported in many studies on migrant adults as well (Searle & Ward, 1990; Ward & Kennedy, 1993b).

Individual significant predictors also emerged for two of the three subscales of RCMAS - worry and Concentration. It was found that greater the number of problem and emotion- focused responses reported by the children, the greater the number of items related to worry endorsed by the children. The relation between emotion-focused coping and negative psychological symptoms has been borne out in studies reported earlier, and it should be noted that emotion- focused coping also significantly predicted endorsement of items related to concentration on the same scale.

This finding of emotion-focused coping being a significant predictor of different kinds of anxiety (specifically, worry and concentration) points to the need to focus on this variable as a possible target for intervention for children who face difficulties in adjustment. The finding that greater number of problem-focused responses also contributed to increased endorsement of items related to worry deserves attention. It is likely that the scale did not tap specific kinds of problem-focused responses which may be adaptive for children. The other possibility is related to the nature of the scale mentioned earlier. Since the score was a reflection of the range or number of problem-focused responses used, it is likely that using some select number of problem-focused responses is more adaptive, as opposed to a variety of responses may not all be adaptive.

With respect to the finding that emotion-focused coping responses affected psychological adjustment, special attention needs to be paid to the factor structure which emerged from this scale. Specifically, while the problem-focused responses appeared to be homogeneous, three factors emerged for emotion-focused coping. Two conclusions can be drawn from this finding. The first is directly related to the way the questionnaire was coded. The results on the factor analysis indicated that children use similar number of problem-focused responses to deal with differing aspects of moving to a new country, but use different number of emotion-focused responses for dealing with various issues.

The second implication of this finding is the need for future studies for a more refined distinction of emotion-focused responses. While problem-focused coping is more directive and often

involves a direct confrontation with the problem, many diverse strategies may be present under the rubric of emotion-focused coping, ranging from active avoidance to emotional reactions like crying. Recently Sandler, Tein, and West (1994) developed a four-dimensional model of coping, with the factors being active coping, avoidance, distraction and support. (Causey & Dubow, 1992) conceptualized two basic kinds of coping - approach strategies and avoidance strategies. The former was thought to comprise of problem-focused coping and seeking social support, while the latter was thought to consist of externalizing, distancing, and internalizing. These studies demonstrate that coping strategies may not comprise of two factors, but may encompass a wider range of strategies, and this suggests a need for future studies to use finer distinctions between coping responses. It is recommended that future studies should incorporate diverse kinds of emotion-focused and problem-focused responses.

Overall, the finding with respect to this scale is that the total scores obtained on each of the two subscales is merely a reflection of the number of coping responses a child uses. It may be beneficial for future researchers to examine the differential use of each coping response, and also perceived efficacy of coping responses, since this has been shown to affect outcome. For example, Cummings, Davies, and Simpson (1994) found that appraisal of coping efficacy was one of the factors predicting children's adjustment. This suggests that the relationship between coping response and outcome may be affected by perceived efficacy of coping response.

Behavioral problems reported by parents on the CBCL-P could be predicted by children's per-

ception of bad life events. This indicates that children's perception of bad life events is related to parental report of total behavioral problems. This relationship between bad life events and psychological adjustment, together with the finding noted earlier regarding the relationship between children's endorsement of anxious symptoms and bad life events supports the notion that bad life events have a significant impact on children's behavioral and psychological adjustment. Regarding predictors of the internalizing and externalizing subscales of the CBCL-P, it was found that different variables predicted each kind of problem. Specifically, emotion-focused coping reported by children was found to predict parents reports of internalizing behavioral problems. Examination of the correlation between these two variables also suggests that they were significantly related ($r = 0.2579$, $p = 0.025$) before application of Bonferroni correction. These findings suggest the possibility that greater use of emotion- focused responses by children may contribute to greater internalizing problems, as perceived by parents. However, caution needs to be applied with regard to interpreting this correlation as it was statistically insignificant after the application of the Bonferroni correction, as noted earlier. A recent study which supports this notion (Armistead, McCombs, Forehand, & Wierson, 1990) found that females who reported use of more avoidance strategies manifested more internalizing problems.

In the present study, Externalizing problems were found to be predicted by cultural distance. Examination of the correlation matrix shows that the relationship between these two variables was also significant ($r = 0.2309$, $p = 0.046$) before the application of the Bonferroni correction. This finding suggests that the greater the difference between home and host cultures perceived by the

children, the greater the number of externalizing problems perceived by their parents. This implies that there may be a possibility that children react to greater cultural differences by use of more externalizing problems. Before this possibility is examined, it should be noted that this result needs to be interpreted with caution, for parent's responses on the CBCL-P may have been affected by culture. Specifically, it is likely that parents from culturally different regions may give varying weightage to what is considered problematic behavior, and their responses may be consequently affected by this. In support of this, Drotar, Stein, and Perrin (1995) recently wrote, "Parents in some cultural or ethnic groups may interpret their children's symptoms in unique ways and may have different thresholds for distress or concern about particular behavior problems" (p. 187). McDonald, Achenbach, and Motti (1995) found that nationality accounted for 14% variance on Anxiety/Depressed scores of the CBCL-P. They also found that Greeks scored higher on internalizing, externalizing, and total problem scores than Americans. In addition, they found that competency scores were higher for Americans than Greek children, as reported by parents. Weisz, Sigman, Weisz, and Mosk (1993) also found cultural differences in CBCL reports by parents. They found that Embu children in Kenya were rated highly on overcontrolled behavior problems, while Caucasian American children were rated highly on undercontrolled behavioral problems. These findings suggest the need to consider cultural factors while interpreting results from scales such as the CBCL. Along these lines, the finding in this study that cultural distance accounted for 5% externalizing scores may be a reflection of differences in what parents report or perceive as problematic, as opposed to the notion that cultural distance may predict incidence of externalizing problems.

Another caution regarding the CBCL-P results is related to the reliability coefficient obtained. It should be kept in mind that the reliability coefficient of the CBCL-P was found to be very high and there is a possibility that this may be related to parents responding in the 'not true' category for most items in the questionnaire. Hence the results of the CBCL-P need to be examined in this light.

Regarding both the dependent variables, although a moderate proportion of variance was accounted for (especially anxiety score from RCMAS), there is a need to improve the predictive utility of models dealing with sociocultural and psychological adjustment. One way to achieve this would be the inclusion of more variables in the models. For example, parental adjustment has been found to be an important factor affecting a child's psychological adjustment. In their study on adolescents who relocated to Japan, Nathanson and Marcenko (1995) found that the most important correlation of emotional well-being of a child was related to family life. Specifically, they found that emotional well-being was correlated with frequency with which children saw their father. Studies in other fields also strongly support the relationship between parental adjustment and children's adjustment (Creasey & Jarvis, 1994; Frick, 1993).

Studies in adult cross-cultural literature have found some significant predictors of both psychological and sociocultural adaptation which were not considered in this study. Sociocultural adjustment has been found to be related to host national identification (Ward & Kennedy, 1994), cultural knowledge and cultural identity (Ward & Searle, 1991), and acculturative strategies (Ward &

Kennedy, 1992). Psychological adjustment has been found to be related to extroversion (Searle & Ward, 1990) and locus of control (Ward & Searle, 1991). Future studies should explore the potential predictive utility of such variables with children.

Another method to improve the amount of variance accounted for may be to use measures developed and normed for such populations, as there is a possibility that the measures used in this study may not have been sensitive enough for this population, as noted earlier.

It should be noted that the sample of study was restricted to children located in Blacksburg. It is likely that circumstances surrounding their adjustment to a foreign country is different from that of a different group of children, for example, refugee children. Hence, caution must be taken to apply the findings of this study to children who migrate under different conditions.

Limitations

The foremost limitation of this study was the employment of a data-driven approach. This limits the generalizability of these results with other samples. In keeping with this, it is recommended that the results be verified with a different sample.

The other limitation of this study was the use of questionnaires which had been normed on populations different from the one used in this sample. It should be noted that that with the exception of three scales - Coping Questionnaire, Sociocultural Adjustment Scale, and Cultural Distance Scale, none of the other scales had been normed on or developed for use with a population such

as the one used in this sample. A disadvantage of this is the possibility that this may have affected the reliability indices found in the study. One method to improve reliability of measures for use with diverse populations such as the one used in the study is to develop specific scales for this population, as against using scales which have been widely used, but with other populations.

As noted earlier, caution needs to be employed against the use of measures normed on populations other than the one used in a study. Unfortunately, few measures exist for use with international children. It is an in-between population, neither belonging to their home country anymore, nor fully acculturated into the host country. Hence, measures developed either for use with the local home population or with the host population would be inappropriate for use with this population. An indication from this study which suggests this need to develop specific scales for use with this population was the finding that for all scales (except for Coping Questionnaire) the obtained reliability indices in this study were lower than those reported in the original studies. This suggests that measures developed for other samples may not be suitable for these children. Even for the scales developed specifically for use with international populations (Sociocultural Adjustment Scale and Cultural Distance Scale), reliability indices were lower in this study than in previous studies. Because factors influencing children's adjustment and overall adjustment may be different from that of adults, it is likely that measures developed for use with immigrant adults may not be as suitable for children.

Another drawback of this study was the omission of potentially useful variables that might have affected the dependent variable. As noted earlier factors like parental adjustment and cultural identity have been found to be predictive of adaptation in adult literature, and it may be important for future research to include such variables.

This study was carried out in the English language on previously non-English speaking subjects. Although efforts were taken to ensure that the child had an adequate grasp of English, it is likely that the child's knowledge of English may have affected their responses. Furthermore, this study did not examine the parents' knowledge of English, and parents responses hence need to be interpreted with caution.

Yet another limitation of this study concerns the small n-size of the sample of study. The results of this study should be interpreted keeping in mind these limitations, and future studies should strive to tackle these issues.

Implications for Intervention

The findings of this study point to certain useful steps which could be taken to help children adjust to new sociocultural environments. These are briefly noted below.

Social-skills training for children of immigrants, especially for those from cultures very different from USA. This would also discourage use of emotion-focused coping indirectly, which may enhance adjustment to sociocultural adjustment. Another recommendation is the introduction of

host-family programs for children, especially those from a very different cultural background, to help them adjust better to sociocultural aspects of the new environment.

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Table 1: Reported Predictors of Sociocultural and Psychological Adaptation

<i>Studies</i>	<i>Sociocultural Adaptation</i>	<i>Psychological Adaptation</i>
Searle and Ward (1990)	Cultural distance	Extroversion
	Expected difficulty	Life changes
	Depression	Social difficulty
		Satisfaction of relations with hosts
Ward and Searle (1991)	Cultural knowledge	Loneliness
	Cultural identity	Cultural distance
Ward and Kennedy (1992)	Length of stay	Locus of control
	Cultural distance	Personal relationship satisfaction
	Cultural identity	Social difficulty
	Mood disturbance	Host national contact
Ward and Kennedy (1993)	Length of residence	Life changes
	Cultural distance	Social difficulty
	Interaction with host and co-nationals	Locus of control
	Extroversion	Social support
	Acculturation strategies	
	Mood disturbance	

Table 2: Pilot Sample Demographics

Home Country	Number of subjects
Argentina	1
Brazil	2
England	1
Ghana	1
India	2
Japan	2
Spain	1

Mean Age = 10.45

Mean number of months of stay in USA = 30.2

Table 3: Reliability Coefficients for Main Study

Scale	Cronbach's Alpha
Cultural Distance	0.700
Sociocultural Adjustment	0.730
Coping Questionnaire	0.734
Problem-Focused	0.845
Emotion-Focused	0.600
Social Support Questionnaire-6	0.763
Quantity	0.693
Quality	0.620
Revised Childrens Manifest Anxiety Scale	0.750
Worry	0.746
Physiological	0.554
Concentration	0.685
Child Behavior Checklist-Parent	0.933

Table 4: Statistics regarding Factor Analysis

Factor	What Loaded?	Partition of Variance	Cumulative Percentage
1	Problem-focused coping	37.1	37.1
2	Emotion-focused coping	22.8	59.9
3	Emotion-focused coping	9.8	69.7
4	Emotion-focused coping	6.9	76.6
5	Emotion-focused coping	6.5	83.1

Table 5: Regionality of Subjects

Continent	Number of Children
Africa	7
Asia	53
Europe	16
South America	3
Unknown	1

Table 6: Main Study Demographics

Age	Frequency	Percent
7.00	4	5.0
8.00	17	21.3
9.00	8	10.0
9.50	1	1.3
10.00	7	8.8
11.00	10	12.5
12.00	7	8.8
13.00	6	7.5
14.00	1	1.3
15.00	8	10.0
16.00	6	7.5
17.00	2	2.5
18.00	2	2.6
.	1	1.3
Total	80	100.0

Gender	Frequency	Percent
Male	47	58.75
Female	33	41.25
Total	80	100

Table 7: Means and Standard Deviations

Variable	Mean	Standard Deviation
Cultural Distance	20.20	6.34
Coping-Problem Focused	11.05	3.98
Coping-Emotion Focused	1.40	1.63
Social Support-Quantity	16.09	6.68
Social Support-Quality	28.58	6.41
Life Events-Good	7.61	4.14
Life Events-Bad	4.71	4.64
Length of Stay (months)	31.62	26.91
Sociocultural Adjustment	32.64	8.62
Total Anxiety (RCMAS)	7.98	4.50
Worry	3.47	2.65
Physiological Anxiety	2.63	1.95
Concentration	1.87	1.63
CBCL-Total	44.64	12.19
CBCL-Externalizing	45.65	9.45
CBCL-Internalizing	43.65	9.45

Table 8: Comparison of Mean Scores for RCMAS and CBCL-P between Present Sample and Standardization Sample

Variable	Mean	Mean
	Present Sample	Standardization Sample
Total Anxiety (RCMAS)	7.98	11.70
Worry	3.47	4.81
Physiological Anxiety	2.63	4.10
Concentration	1.87	2.80
CBCL-Total	44.64	50.00
CBCL-Externalizing	45.65	50.00
CBCL-Internalizing	43.65	50.00

Table 9: Pearson Moment Correlation

CULDIST	1.0000 P=.																									
COPPROB	.2747 P=.014	1.0000 P=.																								
COPEMO	.1099 P=.332	.1316 P=.245	1.0000 P=.																							
SOCSUPNU	.2627 P=.019*	.0232 P=.838	.1529 P=.176	1.0000 P=.																						
SOCSUPQU	.1149 P=.310	-.0230 P=.840	.0978 P=.388	.5408 P=.000**	1.0000 P=.																					
LIFEVEGO	-.0446 P=.697	.2197 P=.052	.0969 P=.395	.2255 P=.046*	.2905 P=.009*	1.0000 P=.																				
LIFEVEBD	.0827 P=.469	-.1942 P=.086	.1758 P=.121	.0393 P=.731	.2221 P=.049*	-.1579 P=.165	1.0000 P=.																			
TOTANXTY	.1129 P=.322	.1998 P=.077	.3222 P=.004**	-.0445 P=.697	-.0209 P=.855	.0022 P=.984	.2563 P=.024*	1.0000 P=.																		
WORRY	.1673 P=.141	.2408 P=.033*	.2983 P=.008*	.0638 P=.577	-.0407 P=.722	.0592 P=.607	.1845 P=.106	.8558 P=.000**	1.0000 P=.																	
PHYSIOLO	.0050 P=.965	.0389 P=.734	.1387 P=.223	-.1509 P=.184	.0002 P=.999	-.0214 P=.853	.2172 P=.056	.7556 P=.000**	.4187 P=.000**	1.0000 P=.																
AGE	.2912 P=.009*	-.1168 P=.305	-.0130 P=.910	.1853 P=.102	.2133 P=.059	-.1453 P=.204	.2125 P=.062	-.2583 P=.022*	1.0000 P=.																	
GENDER	.2111 P=.060	.0279 P=.806	.0911 P=.422	.3679 P=.001**	.2154 P=.055	-.0753 P=.510	.0257 P=.822	-.0475 P=.678	.0091 P=.937	.0383 P=.737	1.0000 P=.															
SCAD	.3697 P=.001**	.1459 P=.196	.2815 P=.011	.0045 P=.968	.1965 P=.081	-.0449 P=.695	.1268 P=.266	.1558 P=.170	.1834 P=.106	.1339 P=.236	1.0000 P=.															
CBCLT	.1672 P=.152	-.0345 P=.769	.1895 P=.104	-.0005 P=.996	.0981 P=.402	-.0084 P=.943	.2417 P=.038*	.1811 P=.122	.0184 P=.876	.3155 P=.006*	.0288 P=.806	1.0000 P=.														
CBCLIT	.1242 P=.288	.0853 P=.467	.2579 P=.025*	-.0168 P=.886	.0800 P=.495	-.0076 P=.949	.1596 P=.174	.1831 P=.118	.0503 P=.670	.2549 P=.028*	.0224 P=.052	.8436 P=.000**	1.0000 P=.													
CBCLT	.2309 P=.046*	-.0382 P=.745	.1667 P=.153	.1137 P=.331	.1805 P=.121	-.0409 P=.729	.2216 P=.058	.1180 P=.317	-.0141 P=.905	.2322 P=.047*	.1839 P=.114	.8919 P=.000**	.7135 P=.000**	1.0000 P=.												
SQRTCON	.1338 P=.243	.2044 P=.073	.3561 P=.001**	.0553 P=.631	.0742 P=.518	-.0692 P=.550	.2500 P=.028*	.7026 P=.000**	.4360 P=.000**	.4229 P=.000**	.1406 P=.220	.2264 P=.046*	.1306 P=.271	.1634 P=.167	.0895 P=.452	1.0000 P=.										
STAY	.0931 P=.412	-.0910 P=.422	-.2395 P=.032*	-.0017 P=.988	.0094 P=.934	-.0289 P=.800	.0163 P=.887	.0842 P=.461	.0601 P=.599	.1508 P=.185	.0351 P=.758	-.2158 P=.055*	.0018 P=.988	.0546 P=.642	-.0358 P=.760	.0077 P=.947	1.0000 P=.									

* $P \leq 0.05$
** $P \leq 0.004$

Table 10: Path Analytical Results of Whole Model Using RCMAS

PATH ANALYSIS1				
Equation Number 1				
Dependent Variable.. TOTAL ANXIETY				
Multiple R	.31536			
R Square	.09945			
F =	1.63445	Signif F =	.1615	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
SCAD	.151690	.114109	.151690	.1878
SOCSUPNU	-.001922	.132874	-.001922	.9885
LIFEEVBD	.283248	.117057	.283248	.0180
LIFEVEGO	.094880	.119376	.094880	.4293
SOCSUPQU	-.140140	.143376	-.140140	.3315

Equation Number 2				
Dependent Variable.. SOCIOCULTURAL ADAPTATION				
Multiple R	.56143			
R Square	.31520			
F =	4.08496	Signif F =	.0005	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
SOCSUPQU	.311629	.124720	.311629	.0148
MTHST	-.206509	.102530	-.206509	.0478
COPPROB	.022957	.109595	.022957	.8347
COPEMO	.207610	.105865	.207610	.0538
CULDIST	.394326	.109636	.394326	.0006
LIFEEVBD	-.006372	.108332	-.006372	.9533
LIFEVEGO	-.086738	.109826	-.086738	.4323
SOCSUPNU	-.280436	.122773	-.280436	.0254

Table 11: Path Analytical Results of Whole Model Using CBCL-P

Dependent Variable..	CBCLT			
Multiple R	.25013			
R Square	.06257			
F =	.98777	Signif F =	.4311	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
SCAD	-6.67498E-04	.116422	-6.675E-04	.9954
SOCSUPNU	-.051235	.135568	-.051235	.7066
LIFEEVBD	.231641	.119431	.231641	.0562
LIFEVEGO	.019724	.121796	.019724	.8718
SOCSUPQU	.068761	.146283	.068761	.6397

Table 12: Final Model for Sociocultural Adaptation

Dependent Variable.. SOCIOCULTURAL ADAPTATION				
Multiple R	.55597			
R Square	.30910			
F =	6.62140	Signif F =	.0000	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
SOCSUPQU	.288744	.114988	.288744	.0142
MTHST	-.208642	.100317	-.208642	.0410
CULDIST	.410045	.101194	.410045	.0001
COPEMO	.202678	.101313	.202678	.0491
SOCSUPNU	-.290716	.118917	-.290716	.0169

Table 13: Goodness of Fit Statistics

Goodness of Fit Index (GFI)	=	0.91
Adjusted Goodness of Fit Index (AGFI)	=	0.82
Chi-Square	=	52.60 (P = 0.058)
Chi-Square to Degree of Freedom Ratio	=	1.38

Table 14: Significant Variables for Each Dependent Variable of Psychological Adaptation

Dependent Variable..	TOTAL ANXIETY(RCMAS)			
Multiple R	.32608			
R Square	.10633			
F =	9.04229	Signif F =	.0036	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
COPEMO	1.003844	.333831	.326078	.0036

Dependent Variable..	WORRY			
Multiple R	.39093			
R Square	.15283			
F =	6.76501	Signif F =	.0020	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
COPPROB	.151017	.070595	.228920	.0357
COPEMO	.471793	.173306	.291319	.0081

Dependent Variable..	CONCENTRATION			
Multiple R	.34612			
R Square	.11980			
F =	10.20788	Signif F =	.0020	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
COPEMO	.157053	.049156	.346121	.0020

continued on next page ...

...continued from previous page

Dependent Variable..	CBCL-TOTAL			
Multiple R	.24173			
R Square	.05844			
F =	4.46843	Signif F =	.0380	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
LIFEEVBD	.629221	.297663	.241733	.0380
Dependent Variable..	CBCL-EXTERNALIZING			
Multiple R	.23602			
R Square	.05571			
F =	4.24741	Signif F =	.0429	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
CULDIST	.354081	.171807	.236020	.0429
Dependent Variable..	CBCL-INTERNALIZING			
Multiple R	.27840			
R Square	.07750			
F =	6.04916	Signif F =	.0163	
----- Variables in the Equation -----				
Variable	B	SE B	Beta	Sig T
COPEMO	1.666110	.677417	.278396	.0163

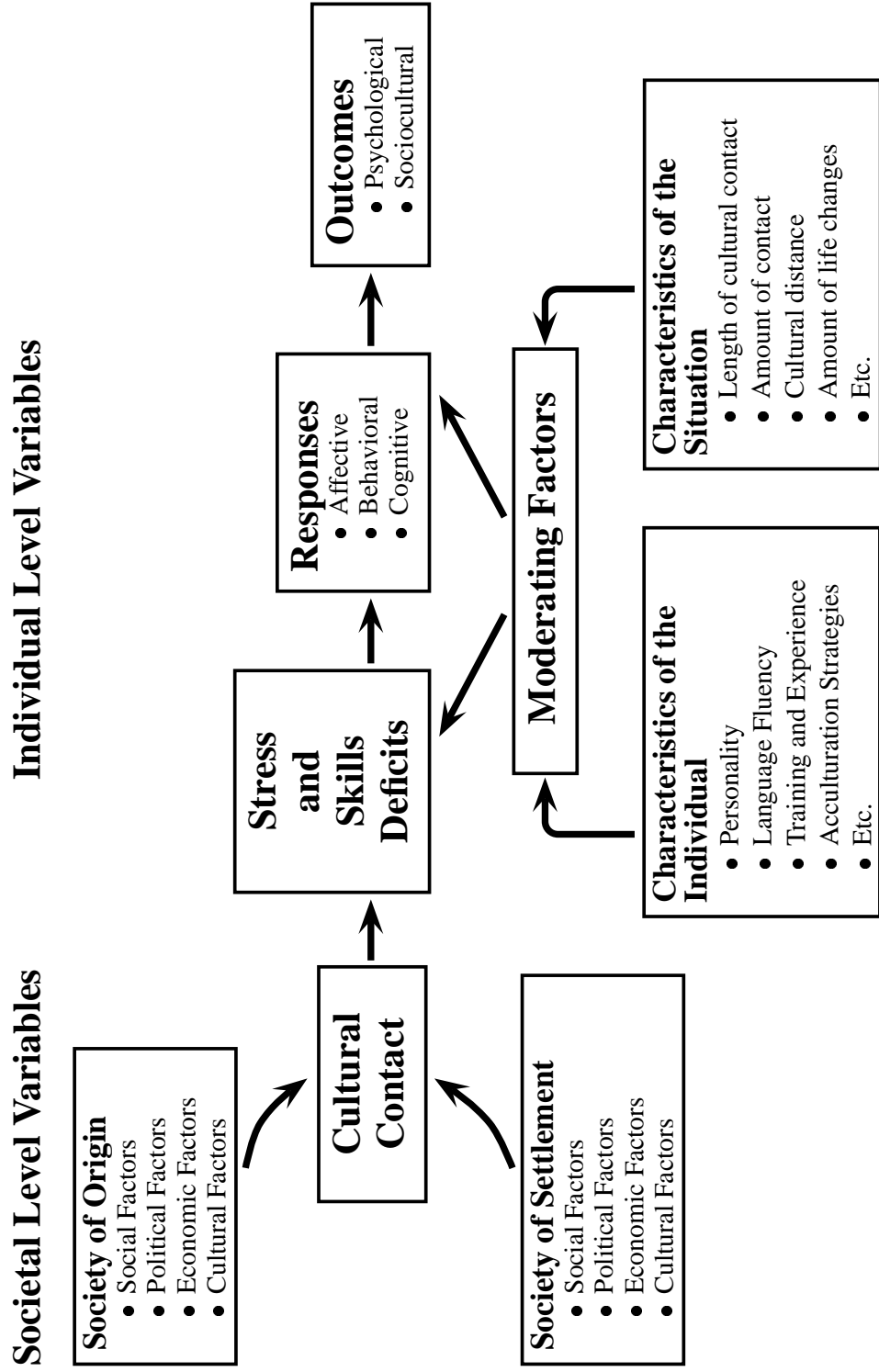


Figure 1: Ward's Model of Acculturation

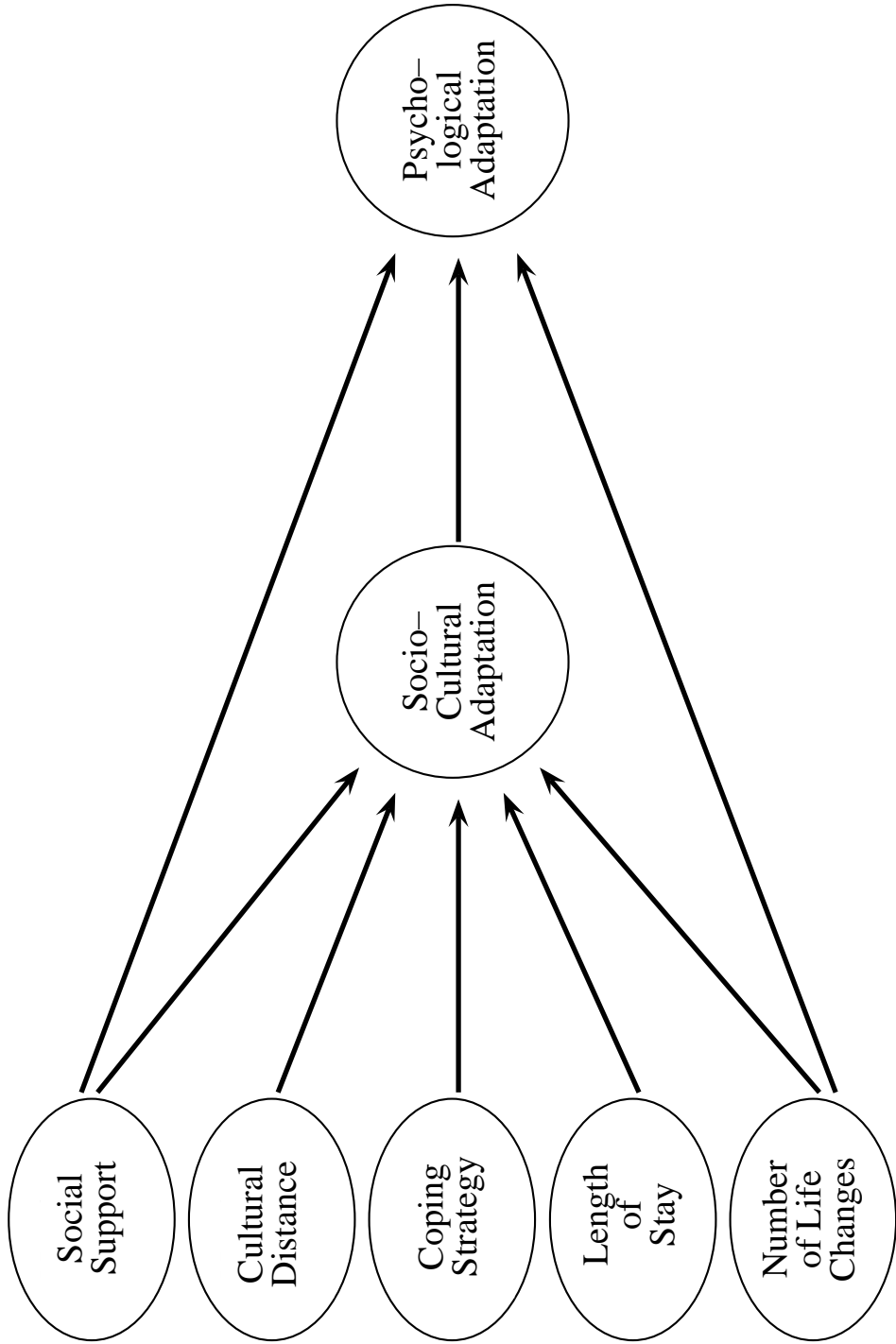


Figure 2: Proposed Model

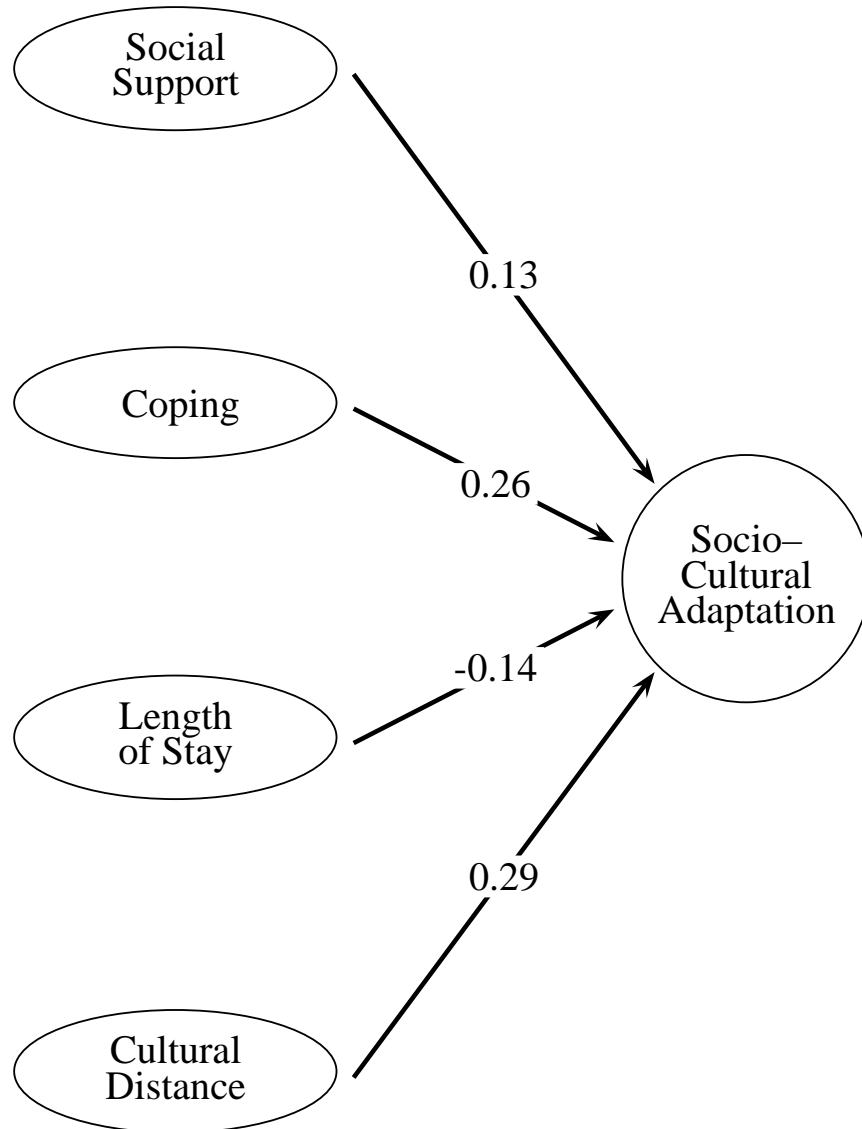


Figure 3: Final Model

APPENDIX A**Virginia Polytechnic Institute and State University
Assent Form**

Nature of Project: Cultural Adaptation

Investigator: Uma Talwalkar

You are invited to participate in a study concerning adjustment of children and adolescents who move to a new country. If you are between 8 and 15 years old (both 8 years and 15 years is included) and have lived in USA for 5 or less than 5 years, you are eligible to be a part of this study.

If you choose to participate in this study, you will be required to fill out some questionnaires which will take about 1 hour. While filling this out, there will be about 8–10 other children like yourself also filling the questionnaires. If you feel the need to fill out the questionnaires privately, such an arrangement will be provided. If you do not understand the language, there will be someone from your country who will help you to understand the questions. If you feel bad about anything while filling out the questionnaires, you are welcome to stop doing so. Also, if this happens, talk to one of the adults in the room, and they will help you.

The results of this study will be kept confidential, that is, will not be told to anyone. You will not be asked to write your name on any of the questionnaires you fill out, so nobody will know which questionnaire you specifically filled out.

The results of this study will help us understand how children adjust to a new country. Hence, in future, this will be useful to us in helping others who come from your country to adjust better.

I have read and understand the nature of the study described above. I hereby give my assent to be a part of this study. I further understand that I may withdraw at any point during the study without penalty. I also understand that if I have any questions about the study, I can talk to the adults who will be present in the room where I will be filling out the questions.

Date

Subject #

APPENDIX B

Virginia Polytechnic Institute and State University Informed Consent Form

Nature of project: Cultural Adaptation

Principal Investigator: Uma Talwalkar

Purpose of Research:

You and your child are invited to participate in a study concerning adjustment of children to a new or unfamiliar country. Through this study we hope to gain an understanding of some of the factors which help children in the process of adjusting to a new country.

Procedures:

If your child is between 8 and 15 years (both inclusive), and you have lived in the United States of America for 5 or less than 5 years, you are eligible to participate in this study.

As a participant in this study, you will be required to fill out one questionnaire that will take approximately 10 minutes to fill out. Your child will be required to fill out a number of questionnaires that will take no longer than 1 hour to complete. The content of these questionnaires will include feelings about moving to a new country, what differences exist between this country and your home country, how they dealt with this difference, and also questions about your child's friendships and social support network. Your child will be required to fill this in groups with other children, and these groups may be held at the Cranwell International Center. In case your child should wish to fill out these questionnaires privately, necessary steps will be taken for him/her to do so.

Risks:

Previous studies in this field have shown no evidence of any kind of distress to children participating in studies of this nature. In order to make your child feel more comfortable, he/she will be required to fill the questionnaires in groups with other children. There will also be translators available for your child in case your child cannot comprehend the questions. These translators will also be trained to detect if your child is in distress at any point while filling out the questionnaires, and will take the appropriate steps in the event of this happening. Also, if you or your child wish to withdraw from the study at any point, you are free to do so.

Confidentiality:

The results of this study will be kept confidential. The information which both you and your child provide will have only a subject number assigned to it, and no mention of your name will be made at any time during the study. If at any time you wish to stop filling the questionnaire, or your child wishes to stop filling the questionnaires, you are free to stop participating in the study.

The information you provide will be used only for scientific purposes. This may include presentation of the results at a scientific meeting, and / or being published in a professional books, or used for other purposes that the Virginia Tech Department of Psychology deems proper in the interest of education, knowledge, or research. However, as mentioned earlier, neither you nor your child will be identified by name in any way.

Benefits of this Project:

It is hoped that this study will help in understanding some of the factors which help children in adjusting to a new country. This knowledge will be useful to administrators and parents to help children to adjust better to a new country.

You will be provided a brief summary of the results of the study once it is completed. In case of any questions, you are welcome to contact the principal investigator of this study.

Approval of Research:

This research project has been approved by the Human Subjects Department of the Department of Psychology and by the Institutional Review Board of Virginia Tech. It also has the approval of the Cranwell International Center at Virginia Tech.

I have read and understand the above description of the study. I hereby acknowledge the above and give my voluntary consent for my and my child's participation in this study. I further understand that if I participate, I may withdraw at any point during the study without penalty. I understand that if I should have any questions regarding this research, and its conduct, I should contact any of the person's named below:

Primary Researcher:	Uma Talwalkar	Phone: (540)552-8603
Faculty Advisor:	Russell T. Jones, Ph.D.	Phone: (540)231-5934
Chair IRB:	Ernest Stout	Phone: (540)231-9359

Date

Identification #

APPENDIX C

The Cultural Distance Scale

We are interested in knowing about how living in the United States is different than living in your home country. Use the scale provided to rate how your living in the United States of America is different from living in your home country in each of the following areas.

Zero indicates no different, while 4 indicates extremely different

0 = No different to USA

1 = A little different

2 = Some difference

3 = A lot different

4 = Extremely different.

Please circle the appropriate number:

1.	Climate/weather	0	1	2	3	4
2.	Clothing	0	1	2	3	4
3.	Language	0	1	2	3	4
4.	Kind of school	0	1	2	3	4
5.	Food	0	1	2	3	4
6.	Praying	0	1	2	3	4
7.	Having a TV, video and sofa at home (e.g., standard of living)	0	1	2	3	4
8.	Kind of games played, recreational activities	0	1	2	3	4
9.	Family life	0	1	2	3	4
10.	Forming friendships.	0	1	2	3	4

APPENDIX D

The Life Events Checklist - Modified

Instructions: Below is a list of things that sometimes happen to children. Put an X in the space by each of the events that have happened to you during the past five years. For each of the events you check, also indicate if you felt that the event was a good event or bad event. Finally, write down how much you feel the event has changed or has had an impact or effect on your life by placing a circle around the correct statement. Remember for each event you have experienced over the past year

(1) place an "X" in the space to indicate you have experienced the event

(2) indicate whether you viewed the event as a good or bad event

(3) indicate how much effect the event has had on your life.

Only respond to those events which you have actually experienced during the past year.

Event	<i>Type of event</i>		<i>Impact of effect of Event on your life</i>			
	Good	Bad	no	some	moderate	great
1. Moving to a new home	Good	Bad	no	some	moderate	great
2. New brother or sister	Good	Bad	no	some	moderate	great
3. Changing to a new school	Good	Bad	no	some	moderate	great
4. Serious illness or injury of family member	Good	Bad	no	some	moderate	great
5. Increased number of arguments between parents	Good	Bad	no	some	moderate	great
6. Mother or father lost job	Good	Bad	no	some	moderate	great
7. Death of a family member	Good	Bad	no	some	moderate	great
8. Parents separated	Good	Bad	no	some	moderate	great
9. Death of a close friend	Good	Bad	no	some	moderate	great

10.	Increased absence of parents from the home	Good	Bad	no	some	moderate	great
11.	Brother or sister leaving home	Good	Bad	no	some	moderate	great
12.	Serious illness or injury of close friend	Good	Bad	no	some	moderate	great
13.	Parent getting into trouble with law / police	Good	Bad	no	some	moderate	great
14.	Parent getting a new job	Good	Bad	no	some	moderate	great
15.	Change in parents' financial status	Good	Bad	no	some	moderate	great
16.	Trouble with brother or sister	Good	Bad	no	some	moderate	great
17.	Special recognition for good grades	Good	Bad	no	some	moderate	great
18.	Losing a job	Good	Bad	no	some	moderate	great
19.	Making the honor roll	Good	Bad	no	some	moderate	great
20.	Failing a grade	Good	Bad	no	some	moderate	great
21.	Increase in number of arguments with parents	Good	Bad	no	some	moderate	great
22.	Major personal illness or injury	Good	Bad	no	some	moderate	great
23.	Trouble with teacher	Good	Bad	no	some	moderate	great
24.	Failing to make an athletic team / sports team	Good	Bad	no	some	moderate	great
25.	Making failing grades on report card	Good	Bad	no	some	moderate	great
26.	Making an athletic team	Good	Bad	no	some	moderate	great
27.	Trouble with classmates	Good	Bad	no	some	moderate	great

28.	Getting recognition for athletic performance	Good	Bad	no	some	moderate	great
-----	--	------	-----	----	------	----------	-------

Other events which have had an impact on your life. List and rate.

29.	_____	Good	Bad	no	some	moderate	great
30.	_____	Good	Bad	no	some	moderate	great
31.	_____	Good	Bad	no	some	moderate	great
32.	_____	Good	Bad	no	some	moderate	great

APPENDIX E

Coping Questionnaire

Given below are some of the areas in which children living in a foreign country are generally known to find different. We would like to know what you did or are doing to deal with, or, cope with these differences. Please tick the appropriate response, that is, what you did, for each situation. If you did something other than what is listed, please tell us what you did by writing it down under the section "Any other way I dealt with it". If you did not experience the difference, then tick the "Not appropriate" box and move on to the next question.

[A] Living under different climatic and weather conditions:

- (1) Stayed at home
 - (2) Complained a lot and did not know what to do
 - (3) Went out more to get used to it
 - (4) Did nothing
 - (5) Cried
 - (6) Learnt to wear different clothes in different seasons
 - (7) Any other way of dealing _____

- () Not applicable

[B] Wearing different kinds of clothes:

- (1) Did not wear clothes like other Americans/continued wearing clothes from my country
 - (2) Started wearing clothes like other Americans
 - (3) Cried
 - (4) Saw what clothes other children wore, and learnt to wear the same kind of clothes
 - (5) Complained and did not what to do
 - (6) Was scared of wearing clothes like other children
 - (7) Any other way of dealing _____

- () Not applicable

[C] Learning to speak a different language:

- (1) Cried
 - (2) Went to an ESL class
 - (3) Practiced speaking with friends/parents/guardians
 - (4) Avoided learning it
 - (5) Felt bad about being speaking differently
 - (6) Read books and heard others speak English so I could learn better
 - (7) Any other way of dealing _____

- () Not applicable

[D] Different kind of school than in home country:

- (1) Made friends who helped me to get to know the school
 - (2) Spoke with teachers to learn about the school
 - (3) Complained and did not know what to do
 - (4) Cried
 - (5) Learnt about different things in the school by talking to classmates
 - (6) Felt scared and wanted to go back to my home country
 - (7) Any other way of dealing _____

- () Not applicable

[E] Eating different kind of food:

- (1) Did not eat American food at all/ continued eating only food from home country
 - (2) Decided to try American food and see whether I like it
 - (3) Continued eating food from home country but also sometimes ate American food
 - (4) Cried
 - (5) Complained a lot and did not know what to do
 - (6) Disliked American food and wished to go back to my country
 - (7) Any other way of dealing _____

- () Not applicable

[F] Praying in a different way / following a different religion:

- (1) Cried
 - (2) Avoided meeting children because they prayed to a different God
 - (3) Felt bad about praying differently compared to American children
 - (4) Changed to a different religion
 - (5) Asked my friends to take me with them to their place of worship
 - (6) Spoke to friends and got to know about their way of praying
 - (7) Any other way of dealing _____
-
- () Not applicable

[G] Playing different kinds of games and sports:

- (1) Asked my friends or parents to teach me to play new games
 - (2) Watched others play the game I wanted to learn
 - (3) Avoided playing with other children
 - (4) Cried
 - (5) Complained a lot and did not know what to do
 - (6) Read books and magazines to help me learn the games
 - (7) Any other way of dealing _____
-
- () Not applicable

[H] Forming new friendships:

- (1) Went and made friends with other children
 - (2) Asked children if I could be their friend
 - (3) Felt shy or scared to make friends
 - (4) Learnt to do what other children did, so I could be their friend
 - (5) Cried about not having friends
 - (6) Avoided meeting other children
 - (7) Any other way of dealing _____
-
- () Not applicable

APPENDIX F**Sociocultural Adjustment Scale - Modified**

Some children find that living in a different country is difficult in some areas. We would like to know if you are having difficulty in staying in the United States in some areas. Please indicate how much difficulty you are experiencing in U. S. A. in each of these areas. Use the following 1 to 5 scale.

- 1 = No difficulty
- 2 = Slight difficulty
- 3 = Moderate difficulty
- 4 = Great difficulty
- 5 = Extreme difficulty

Please mark your answers in the parenthesis/ brackets to the right of each item. Please read each item carefully and give your immediate response.

1. Making friends with people in the U. S. A. ()1.
2. Getting used to local food. ()2.
3. Following rules ()3.
4. Interacting with teachers. ()4.
5. Going to food stalls or restaurants ()5.
6. Getting used to using the public transport buses. ()6.
7. Getting used to the climate in USA' ()7.
8. Making yourself understood. ()8.
9. Getting used to living in USA. ()9.

10. Going shopping ()10.
11. Dealing with someone who you do not like ()11.
12. Understanding jokes and humor. ()12.
13. Getting used to the kind of houses here. ()13.
14. Dealing with people staring at you. ()14.
15. Understanding the American accent. ()15.
16. Talking about yourself and your feelings. ()16.
17. Praying in the way you used to ()17.

APPENDIX G

Social Support Questionnaire 6 (SSQ6)

Now, please think about people in your life who provide you with help or support. You will read about some situations, and for each situation you read, tell us all of the people you know, not yourself, who you can depend upon / go to for help or support. Please write each person's initials plus their relationship to you and whether they are male or female. Also tell us whether they belong to your home country, or America (if you wish). After you list the people you count on for help and support in each situation, then tell us by looking at this card your overall level of satisfaction / happiness with the help or support you are currently receiving as a whole from all these people. For any given situation you may tell us that you have no support. If so, please write "no one".

1a. Whom can you really count on to distract you from your worries when you are worried?

No one _____ (If no one, check and go to Q#2)

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

1b. How satisfied / happy are you with the support / help these people provide, that is with their helping you when you need help? _____

Scale

1 = very dissatisfied	3 = a little dissatisfied	5 = Fairly satisfied
2 = fairly dissatisfied	4 = a little satisfied	6 = very satisfied

2a. *Whom can you really count on to help you feel more relaxed when under pressure or tense?*

No one _____ (If no one, check and go to Q#3)

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

2b. *How satisfied / happy are you overall with the support/help these people provide, that is with their helping you when you need help?* _____

Scale

1 = very dissatisfied 3 = a little dissatisfied 5 = Fairly satisfied
2 = fairly dissatisfied 4 = a little satisfied 6 = very satisfied

3a. *Who accepts you totally, including your worst and best points?*

No one _____ (If no one, check and go to Q#4)

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

3b. *How satisfied / happy are you overall with the support/help these people provide, that is with their helping you when you need help?* _____

Scale

1 = very dissatisfied 3 = a little dissatisfied 5 = Fairly satisfied
2 = fairly dissatisfied 4 = a little satisfied 6 = very satisfied

4a. *Whom can you really count on to care about you, regardless of what is happening to you?*

No one _____ (If no one, check and go to Q#5)

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

4b. *How satisfied / happy are you overall with the support/help these people provide, that is with their helping you when you need help?* _____

Scale

1 = very dissatisfied 3 = a little dissatisfied 5 = Fairly satisfied
2 = fairly dissatisfied 4 = a little satisfied 6 = very satisfied

5a. *Whom can you really count on to help you feel better when you are feeling generally sad or down in the dumps?*

No one _____ (If no one, check and go to Q#6)

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

5b. *How satisfied / happy are you overall with the support/help these people provide, that is with their helping you when you need help?* _____

Scale

1 = very dissatisfied 3 = a little dissatisfied 5 = Fairly satisfied
2 = fairly dissatisfied 4 = a little satisfied 6 = very satisfied

6a. *Whom can you count on to console you / make you feel better when you are very upset?*

No one _____

Initials	Relationship to you	Male or Female	Home Country or USA
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

6b. *How satisfied / happy are you overall with the support/help these people provide, that is with their helping you when you need help?* _____

Scale

1 = very dissatisfied 3 = a little dissatisfied 5 = Fairly satisfied
 2 = fairly dissatisfied 4 = a little satisfied 6 = very satisfied

APPENDIX H**Revised Children's Manifest Anxiety Scale (RCMAS)**

What I think and Feel

Directions: Read each question carefully. Put a circle around the word YES if you think it is true / correct about you. Put a circle around the word NO if you think it is not true about you.

- YES NO 1. I have trouble making up my mind.
- YES NO 2. I get nervous when things do not go the right way for me.
- YES NO 3. Others seem to do things easier than I can.
- YES NO 4. I like everyone I know.
- YES NO 5. Often I have trouble getting my breath.
- YES NO 6. I worry a lot of the time.
- YES NO 7. I am afraid of a lot of things.
- YES NO 8. I am always kind.
- YES NO 9. I get mad easily.
- YES NO 10. I worry about what my parents will say to me.
- YES NO 11. I feel others do not like the way I do things.
- YES NO 12. I always have good manners.
- YES NO 13. It is hard for me to get to sleep at night.
- YES NO 14. I worry about what other people will think of me.
- YES NO 15. I feel alone even when there are people with me.
- YES NO 16. I am always good.

- YES NO 17. Often I feel sick in my stomach.
- YES NO 18. My feelings get hurt easily.
- YES NO 19. My hands feel sweaty.
- YES NO 20. I am always nice to everyone.
- YES NO 21. I am tired a lot.
- YES NO 22. I worry about what is going to happen.
- YES NO 23. Other children are happier than I.
- YES NO 24. I tell the truth every single time.
- YES NO 25. I have bad dreams.
- YES NO 26. My feelings get hurt easily when I am fussed at.
- YES NO 27. I feel someone will tell me I do things the wrong way.
- YES NO 28. I never get angry.
- YES NO 29. I wake up scared some of the time.
- YES NO 30. I worry when I go to bed at night.
- YES NO 31. It is hard for me to keep my mind on my school work.
- YES NO 32. I never say things I shouldn't.
- YES NO 33. I wiggle in my seat a lot.
- YES NO 34. I am nervous.
- YES NO 35. A lot of people are against me.
- YES NO 36. I never lie.
- YES NO 37. I often worry about something bad happening to me.

CURRICULUM VITAE

Name: Uma Ajit Shenoy
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Present Mailing Address: 506 Broce Drive, #15, Blacksburg, VA 24060
Phone: (540) 552-8603
Permanent Address: N-7 Prathamesh Society,
 Bombay Dyeing Compound,
 Prabhadevi,
 Bombay/Mumbai - 400025
 India

Educational Qualifications:

- Bachelor of Arts (B.A.) from Ferguson College, Pune, India. First Class with distinction (82th University of Pune at the B.A. level.
- Master of Social Work (MSW) with specialization in Medical and Psychiatric Social Work from the Tata Institute of Social Sciences, Bombay, India. Graduated with Grade A. Stood in the top 10
- Diploma in Human Resources Management (DHRM) from the Institute of Management Development and Research, Pune India. Graduated in First Class. Ranked first in the Institute.
- Master's in Clinical Psychology (expected January 1997) from Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA.

Professional Affiliations:

- Student Member: Association for the Advancement of Behavior Therapy (AABT)
- Student Member: Asian-American issues in Behavior Therapy - Special Interest group (SIG) within AABT
- Vice President and Associate Editor: Cross-cultural Behavior Therapy - Special Interest group (SIG) in AABT.

Practical Experience:

[A] In India:

- As part of practical/field experience, I worked in a cancer hospital in Bombay as a student Social Worker. I was involved in a variety of activities in the hospital in the course of the year.. During this time, I initiated play therapy groups for children undergoing therapy. Prior to this, there

was no group for children. During this time, I also worked with a group for controlled cancer patients—After Completion of Therapy (ACT) group, which had been started by a doctor at the hospital. This consisted mainly of adolescents, and some children. I was also involved in counseling women undergoing treatment for cervical cancer. I was also involved in helping the main social workers to conduct groups for patients undergoing radiation therapy. These were mainly information groups. In addition to these group activities, I also had the experience of counseling some individual clients.

- As part of my first year field training during my social Work training, I was placed in an agency working on adult literacy in a slum area in Bombay. As part of this, I conducted adult literacy groups for women in the slum area. I also conducted play groups for their children. these children had difficulty in school, often because the curriculum was not in keeping with their experiences, and the language of instruction was different from their native language. In these groups, I conducted play sessions designed to help them understand the study material better. Another goal of this group was to foster cooperation among the children, as they came from different castes, and their parents often did not associate with each other. Development of basic social skills was the secondary goal of this group.
- Worked for a month as part of practical training experience in a drug and alcohol deaddiction center—“Muktangan”. Most of my experience here consisted of community-based interventions, and prevention programs for slum residents. We conducted street plays, and gave people information about negative effects of alcohol. Also conducted groups for adult males in the Center along with other Social Workers. Case work here was conducted along with the other social workers.

[B] As a student at Virginia Tech:

(a) Clinical Practicum - Psychological Services Center and Child Services Center, Virginia Polytechnic Institute and State University:

August 1994–May 1995

Supervisors: Dr. Russell Jones and Dr. George Clum

August 1995–May 1996

Supervisors: Dr. Richard Eisler and Dr. Cynthia Lease

- I have had the opportunity to work with both adult and child clients, as well as American and International clients to a certain extent. In working with child clients, I have had the experience of dealing with Conduct Disorder, Attention deficit Disorder, Adjustment problems, Pervasive Developmental Disorder, and also had some experience in parent training. With adults, I have dealt with Depression, Anxiety and Adjustment problems.
- During this time, I had the opportunity to develop conceptualizations of client’s cases, develop and carry out treatment plans, carry out psychological assessments. I have also had the opportunity to present comprehensive case- presentations of clients to supervisors and practicum teams.

(b) Clinical Practicum - Southwest Virginia Mental Health Institute (SWVMHI)

August 1996–Present time

Supervisors: Dr. Mears, Dr. Teel and Mr. Parsons

- During this time I have had the opportunity to work with both adult and adolescent patients. In the adolescent unit, I have conducted mental status examinations/psychological assessments, and comprehensive assessments, including personality assessment and intellectual testing. My job responsibilities also include conducting individual therapy and group therapy sessions. In the adult unit, job responsibilities include working as part of a multidisciplinary team, and conducting psychological assessments with the team. Assessing patient's intellectual level, personality-testing, and testing for organicity are also part of my work-experience in this unit. In addition, conducting individual and group therapy sessions are also part of my responsibilities in this unit.

Research Experience:

[A] In India

- During my one year of field experience in the Cancer Hospital, I was involved in a quantitative research initiated by a hematologist-Dr. Advani. This study examined the relation of Retinoblastoma with religion and with consanguineal marriages. I was involved in collecting data, and interviewed 50 children or their families (if the child had expired).

I also carried out a qualitative study, interviewing 10 women suffering from cervical cancer, looking at the effects of cervical cancer on the quality of their lives.

- Worked as a Research Assistant for two months on a project entitled "Private Health Sector Facilities" under Dr. Yesudian at the Tata Institute of Social Sciences in April-May 1992. Worked mainly as an interviewer.

- Completed own Master's thesis project. This study investigated the attitudes of medical students towards "Preventive and Social Medicine" and was mainly an exploratory study.

[B] At Virginia Tech:

- I have been involved in a study by Dr. Russell Jones which investigates young children's coping strategies, and the relation of use of these to effectiveness in solving problems. I have helped analyze the data, and write up the results and discussion. We are currently involved in getting the document ready for publication.

- Along with Dr. Russell T. Jones and other colleagues, I was involved in writing a book chapter—"Representativeness of African-Americans in Behavior Therapy".

Professional Presentations:

- Jones, R. T., Fiore, M., and Talwalkar, U. (1995, November). “Young Children’s Adaptive Coping”. Poster presented at the Annual conference for the Association for the Advancement of Behavior Therapy. Washington D.C.
- Jones, R.T., Davis, M., Jeffries, R., and Shenoy, U. (1996, October). “Representitiveness of African-Americans in Behavior Therapy”. Symposium conducted at Virginia Beach, Virginia.
- Shenoy, U. and Jones, R.T. (1996, November). In Moving to a New Culture: Children and Adolescent’s Adaptation. Poster presented at the Annual conference for the Association for the Advancement of Behavior Therapy. New York.

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