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The Cultural Adaptation and Adjustment Scale (CAAS): A Multidimensional Approach to Assessing Ethnic and Gender Social Identities

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Abstract

A revised instrument for assessing cultural adaptation and psychological adaptation across diverse groups is reported. The Cultural Adaptation and Adjustment Scale (CAAS) was designed as a research tool in counseling and education to examine various facets of human development and adjustment based on the empirical literature. The exploratory factor analytic study builds on an earlier pilot and describes the CAAS psychometric properties with larger diverse samples. This scale examines how social interactions and contact with diverse people generally lead to attitudinal, affective and other changes in development and adjustment that can be explored cross-culturally. The CAAS assesses the degree of personal adjustment, perceived discrimination, cultural sensitivity and social distance that may be related to mental distress and social context. Factor analyses revealed four (bipolar) factors in the scale. Four subscales were derived which had acceptable reliability (alpha) coefficients. This final revision provides a multidimensional assessment of adjustment that is appropriate for youth and adults from diverse groups. The major constructs indexed by the scale are integrated with current theory and models of cultural adaptation and ethnic identity development.

Introduction

Research suggests that not only ethnic minorities but also mainstream persons face difficult circumstances in adapting to new contexts and in experiencing inter-cultural contact. Psychological distress is often linked to acculturation and/or adaptation even for non-immigrant groups in multicultural societies. Acculturation to the lifestyle of dominant culture can generate serious distress if a person does not have the necessary skills to adjust with the mainstream culture. Racism and discrimination are part of daily life for many people and its presence can generate stress that can lead to emotional distress (Clark, Anderson, Clark & Williams, 1999) and adjustment problems. Ethnic minorities face stressors based on differences in cultural values and practices from the mainstream majority culture (National Advisory Mental Health Council, 1998) and the added stresses of facing the challenges of economic survival, feelings of isolation, and difficulties with language. A review of several studies on acculturation and assimilation suggests both positive and negative relationships between high acculturation and psychological distress (Williams & Harris-Reid, 1999). On one hand, minority group males and females may confront adjustment issues differently in a multicultural society. On the other hand, their majority counterparts are often excluded in models and instruments that assess cultural adaptation and acculturation. Very little is known empirically about the extent of those differences. From a cultural-historical perspective (Vygotsky, 1978), it is important to study development on terms of “wholes” or holistically and to consider both objective and subjective stances. Unfortunately, the literature remains fragmented in terms of a variety of models of acculturation and identity

development that differ by group and context (Dion & Dion, 2001; Phinney, 2003; Skinner, Edge, Altman & Sherwood, 2003; Tajfel & Turner, 1986)

Acculturation takes place when members from different cultures are in contact (Berry, Poortinga, Segall, & Dasen, 1992; Bochner, 1982). Inter-Cultural encounters often occur through travel, studies abroad, voluntary and involuntary migration and demographic changes. Individuals of different cultures and gender experience inevitable psychological changes when they interact with new others (Cassidy, O'Connor, Howe & Warden, 2004; Furnham & Bochner, 1986; Taft, 1977; Utsey & Ponterotto, 1996).

The dynamics of acculturation suggest that there are generally two distinct groups, a "dominant group" that has greater influence and power and a second "acculturating group" that undergoes more intense adaptation. The first deliberately or undeliberately inflicts added stress by the changes and adaptation required while the second willingly or unwillingly becomes subject to new pressures or stigma. The "acculturating group" also impacts the dominant group, depending on social and political context. Yet this impact has rarely been considered in relation to psychological adjustment and measurement. The impact may be experienced collectively but varies at an individual level (Berry, et al., 1992).

When a person experiences adverse social situations, s/he may often experience feelings of helplessness and the sense that no matter how hard one tries, it is not possible to succeed, or change the situation. Such a feeling may make the person accept the situation and acknowledge that others are more powerful. A depressed person under such circumstances feels weak, inferior, and subject to depression (Gilbert, 2000; Noh et al,

1999)). According to Berry (1998), members of the ethnic minority groups may use four strategies to handle acculturative stress: assimilation (wish to keep their cultural identity as they are immersed in the dominant one), separation (wish to maintain their cultural values and avoid interaction with others), integration (maintain their culture but also interact with others), and marginalization (have little interest in new culture and in having relationships with others).

Adaptation to the cultural values, norms, and behaviors of the dominant group generally causes unavoidable psychological distress for the members of the acculturating group (Portes, 1990). As a consequence, threats to (cultural) identity, powerlessness, feelings of marginality, sense of inferiority, loneliness, hostility, and perceived alienation and discrimination become major mental health risks (Rutter & Tienda, 2005). This psychological phenomenon is well-documented in anthropology, social, counseling and cross-cultural psychology as "acculturative stress" (Anderson, 1991; Barry and Kim, 1988; Graves, 1967; Krishnan & Berry, 1992; Sandhu & Asrabadi (1998); Williams & Berry, 1991). To emphasize its intensity and highlight the debilitating effects of adaptations that render individuals dysfunctional at multilevels: the physical, psychological, and social, the authors refer to this syndrome as psychological "pain". The literature in multicultural counseling tends to support the hypothesis that this syndrome emerges with any inter-group contact where power and status differentials are prevalent.

Significance

As Western societies become multi-cultural, there is a trend to make provisions for more equal access to economic, political, and social participation. There is also a new

recognition and appreciation of cultural identity of different ethnic groups. In order to advance cultural pluralism, deliberate efforts are being made to promote greater economic, social, and political equity to empower the ethnic groups (Berry, Poorting, Segall, & Dasen, 1992; Nardine, 1990). Yet, most models regarding adaptation in the field tend to promote stage-like sequences in forming ethnic identities that presume subjective experiences to be similar within groups regardless of context, (Cross, 1995; Helms, 1990; Phinney, 1993). Of course, one problem lies in that the assessment of an individual's overall adjustment and more precisely for some, their adaptation as a function of the contexts traversed, the social capital of the individual and their group relative to others.

There is also a conscious attempt to reexamine the role of cultural adaptation to understand and explain significant differences in deviancy and maladaptive behaviors among different gender and ethnic groups (De Vos, 1980). The stark realities are that the adaptation of different ethnic groups in a society remains a painful process for some, while it may be beneficial for others, depending on context factors (Portes, 1999) and individual resources. For instance, Ogbu's (1990) work suggests that in the U.S, involuntary minorities, such as Native, Mexican, African-Americans, and Puerto-Ricans, have suffered more oppression, poverty and powerlessness than autonomous minorities such as Jews, Amish and Mormons, and than voluntary minorities such as Asian, European, and Latin Americans. The former are regarded as more prone to learned helplessness. While all ethnic groups may perceive prejudice, discrimination, and hatred, to some degree, social context, gender and ethnicity are moderating factors that require well designed research.

Studies of the relation between ethnic status and psychological distress have attempted to examine two competing hypotheses: one is that ethnic differences are due primarily to social class effects, and the other is that ethnicity-related effects on mental health over and above social class effects (D'Andrea & Daniels, 2001). Mirowsky and Ross (1980) have labeled these two arguments, respectively, the minority status perspective and the ethnic culture perspective. The former argument asserts that to the extent an ethnic group is both a minority group and disadvantaged, there are chronic social stressors associated with disadvantaged position that produce greater distress. The latter argument, the ethnic culture perspective, assumes that psychological well-being varies with different cultural patterns in terms of beliefs, values, and life-styles. Thus, belonging to a disadvantaged social class does not necessarily place members of an ethnic collectivity at greater risk for psychological disorder.

Is psychological adjustment in ethnic minority populations that differ in the dominant ethnic population, when social class is controlled? If so, would the level of cultural adaptation be a significant predictor? Attempts to examine the former question have extended our analytic strategy to examine both majority and minority groups and gender in this study. Kessler and Neighbors (1986) and Ulbrich, Warheit, and Zimmerman (1989) reported that the effects of social class and the effect of minority status on psychological distress are interactive. That is, the effect of minority status on distress is more pronounced at lower income levels than at higher income levels. The explanation for this relation is that lower status minorities are exposed to more environmental stressors than others and/or they are more emotionally responsive to such stressors, hence the higher prevalence of psychological dysfunction. However,

Somervell, Leaf, Weissman, Blazer, and Bruce (1989) found no evidence of significant or consistent interaction of race (White/Black) with household income or age for depression using data on adults from the five-site ECA study. Roberts and Sobhan (1992) also failed to find interaction effects in a sample of European, African, and Mexican American adolescents. Given that the evidence on interaction effects from the various studies is mixed, additional inquiry clearly is needed, particularly when gender is considered. Few if any studies examine adjustment differences by ethnicity, SES and gender while taking into account the degree of alienation and prejudice experienced socially. Unfortunately, the majority of studies that examine cultural adaptation or identity development are carried out with college students without controlling for SES or including diverse groups in instrument development.

Studies of cultural adjustment or adaptation conducted in the United States tend to confound majority and minority status with SES and ethnicity. Ethnic minority populations are underrepresented in various epidemiological studies. Further, the diagnostic criteria, assessment techniques, test interpretations and therapeutic approaches developed for the European-American populations have been applied to the minority groups often without first addressing cultural validity (Portes, 1990; Rogler, 1999) nor giving due consideration to the factors of language and culture.

The multicultural counseling literature is growing rapidly with descriptions of oppressive relationships, a high degree of alienation among different cultures and learned helplessness among many minority groups (Axelson, 1993; Atkinson, Morten, & Sue, 1989; Pedersen, Draguns, Lonner, & Trimble, 1981; Sue and Sue, 1990). A cultural crisis

prevails in American society that is reflected in physical and psychological tensions, frustrations, and conflict. Several attempts have been made in recent years to understand the dynamics of acculturation processes. Berry and Kim (1988); Brislin, 1981; Fragoso, 1991; Kim & Gudykunst, 1987; Lee, 1991; Padilla, 1980; Sanchez and Fernandez, 1993 and many others have examined acculturation processes in terms of pre-contact, conflict, crisis, and adaptation. Yet, cultural adaptation extends well beyond minority or immigrant experiences and requires a wider and comparative perspective. Majority group members can be sensitive to discrimination and to that towards others depending on their own cultural development and mental health. Just as there is a correlation between intelligence and prejudice, it can be expected that bigotry is associated with mental wellness.

Despite the newly recognized advocacy and acceptance of cultural diversity, barriers associated with group-based inequality (Portes, 1996) remain entrenched and painful (Gurr, 1993; Perlmutter, 1992; Ponterroto, & Pedersen, 1993). These barriers are prime sources of various frustrations, violence, confrontations, drop-out, and stop-out rates in cross-cultural contexts (Brislin, 1981; Locke, 1992). Moreover, Trimble, Mason, & Dinges (1983) found that cultural differences are associated with isolation, passivity, increased stress, anxiety, depression, and other psychological problems. Few instruments exist that can measure climates where discrimination and intolerance might eventually foster conflict and violence.

While research is needed in assessing cultural adaptation and psychological health, some scales have been developed by Cueller, Harris, & Jasso (1980); Garcia &

Lega (1979); Olmedo, Martinez and Martinez (1978), but often without adequate psychometric validation, representative samples or programmatic research. That is, most of these culture-sensitive instruments are developed and employed in one-shot studies with little follow-up regarding comparisons across groups. Some scales are designed only to measure the level of acculturation of a specific American ethnic group (e.g. Chicanos, Asians or Cuban Americans) or assess the level of acculturation (Sodowsky, Lai, & Plake, 1991) without sufficient psychometric or theoretical grounding. Others address the process of adaptation through identity formation stages models (Cross, 1995; Helms, 1990; Phinney, 2003; 1993) leaving out important context and cultural factors.

Gender and Adjustment

In reviewing current explanations for sex differences in mental health, it has been noted that boys seem more susceptible to maladjustment than girls and appear to manifest more aggressive, maladaptive behavior which is more likely to be classified in diagnostic categories (Amato & Keith, 1991, Hetherington et al, 1998, Zill, 1994). It has also been noted that socialization patterns for females value conformity, inhibition and introversion and that it may be more difficult to identify maladjustment for girls in general if socialization patterns mask expression. Males' aggressive tendencies are less socialized or curtailed by society in general. So it may be concluded that while stress is present for both boys and females, the reaction may be sex-differentiated (Belsky, Steinberg & Draper, 1991a, 1991b; Jacklin, 1989; Maccoby, 1992; Maccoby & Jacklin, 1974; and, Tannen, 1990).

In order to fill this gap, Portes, Sandhu, & McPhee, (1994) and Sandhu & Portes, (1995) piloted an instrument which assesses the degree of overall adjustment, discrimination, and discouragement as they adapt culturally in the broad sense. The present study reports results from the revision of the original instrument that is now called the Cultural Adaptation and Adjustment Scale (CAAS) and that in this study is analyzed with larger and more diverse samples. Some important details of the pilot study are next summarized in detailing the procedure of the new revision of the instrument.

The Original CAPS

In the original study a total of 192 students in a Mid-South Urban area voluntarily completed the Cultural Adaptation Pain Scale (CAPS) (Sandhu, Portes, & McFee, 1994). The sample was drawn from the community in a Mid-South city, inclusive of teachers and university students and Secondary School students. The gender distribution was mostly female, and the sample's mean age was 28 years of age. Non-Hispanic whites constituted 75% of the sample with about 10% African American and the rest forming an "other" category of mostly foreign students. Monolinguals in English represented 70% of the sample while 25% spoke a second language and 5% spoke more than two. The sample was designed to establish a baseline for various groups that would be expanded in the future.

Before the current revision, the CAPS consisted of 55 counterbalanced statements answered on a 5 point Likert Scale. Each statement presents a view, feeling or experience related to cultural adaptation to which the individual can respond; "strongly agree", "agree", "not sure", "disagrees" or strongly disagrees". A principal component factor analysis was employed (with a varimax rotation) that yielded a four-factor solution that accounted for more than 35% of the variance, based on Cattell's (1966) Scree test and other standard criteria.

In Table 1 the four factors, items and their loadings are presented to familiarize the reader with the pilot scale before revision. Factor one reflects a pattern where there is felt pain and distress and serves as a strong measure of social adjustment. The person feels looked down upon by others, feels anger caused by others' stereotypes and negative reactions and feels ostracized. Besides being made to feel inferior, the person feels others' hostility and a second-rate treatment. The person does not feel as if she is taken seriously or perceived as capable. The person faces snobbishness and prejudice, feels s/he has to do more than others to prove his/her worth. Sensing different treatment due to cultural origin and gender exacerbates lack of support and alienation as reflected in this factor. Opportunities are not regarded as being equal and the person feels the need to lead a dual life. This factor scale was called the Pain Factor and serves as an indicator of alienation and marginalization.

The second factor was characterized by pessimism concerning limited options in life with a feeling that despite efforts, one will not be able to succeed, and a sense of discomfort was being experienced in most social activities. Sadness and lack of enthusiasm in attempting to succeed by overcoming obstacles lead to having little sense of control. This pattern was labeled as the "Learned Helplessness Factor".

The third factor, in contrast, reflected adequate functioning, a clear sense of identity and well-being. The person feels well adapted and a sense of belonging. They feel a sense of community and effort optimism in getting ahead in society. This factor was named the "Positive Adaptation" factor and was predicted to correlate negatively with the first and second scales.

The last "Bigoted" factor reflected insensitivity to the cultural values of others. The person feels it is fair to blame some ethnic groups for their plight and is uncomfortable with foreign accents. The person feels amused in making fun of cultural stereotypes and attitudes representative of prejudice.

TABLE 1: Original Factor Pattern Loadings

Factor	Factor Loading
<u>Factor 1: Pain</u>	
Feel looked down on by other people.	.69
Become angry about the stereotyping and negative reactions people have.	.68
Feel ostracized by some people.	.65
Feel others try to make them feel inferior.	.63
Feel that some groups have hostility toward them.	.62
Feel treated as second rate citizens some of the time.	.62
Feel they have been denied opportunities they deserve.	.60
Often feel not taken seriously.	.60
Often considered less capable than they really are.	.59
People will often not exchange greetings with them.	.58
Suffer from prejudice and unequal treatment.	.57
Are required to do more than others to prove abilities.	.56
Often feel sense of alienation.	.55
Feel they don't have as much support as others.	.52
Feel many opportunities are denied to them.	.52
Feel status in this society is considered "low" by others because of cultural background, gender, or both.	.50
Often feel they have lead a dual life in this society.	.49
Feel treated the same as others in social situations.	-.44
Often feel pressure to conform.	.43

Feel hurt when negative images about their culture are presented in media. .42

Experience conflict with the cultural values of groups contacted.

.42

Experience more loneliness than others. .41

Factor 2: Learned Helplessness

Feel choices for success in life are limited. .69

Feel that despite all efforts they will not be able to succeed in this society. .60

Feel they do not have as many choices as others around them. .57

Feel uncomfortable in participating in social activities. .54

Feel trying hard to get ahead doesn't work for people like them. .49

Lose enthusiasm in trying to succeed when they know that they have to face
extra obstacles. .43

Feel sad living in present surroundings. .42

Feel that if they try to work hard, they'll have a good future. -.42

Feel they don't have as much support as others. .41

Factor 3: Positive Adaptation

Feel adequate functioning in this society. .62

Feel they have a clear identity in this culture. .61

Feel they have deep roots in this country. .55

Feel a sense of community with others around them. .47

Feel they belong in the present culture. .45

Feel they can get ahead in life as well as anyone else. .41

Are bothered when persons from minority groups take unfair advantage

(to advance themselves). .41

Factor 4: Bigoted

Feel irritated when people are insensitive to the cultural values of others. -.66

Feel it is fair to blame some ethnic groups for their plight. .61

Get impatient when they can't understand a different accent. .50

Not bothered when people use ethnic or racial slurs. .50

Feel amused when people use ethnic or racial slurs. .47

The preliminary findings of the study by Sandhu, Portes and McPhee (1994) suggested that the CAPS was internally consistent and had face validity. However, it was limited to a small, unrepresentative sample. The new study provides a revision with a larger sample and present a shorter, new Cultural Adaptation and Adjustment Scale (CAAS).

METHOD

Participants

A total of 514 students from an urban university in the mid-south voluntarily completed the new scales. The gender distribution was 30% male and 48% female although gender information of 113 participants was missing. The sample's mean age was 26.99 (S.D 9.62) years; (age information of 114 participants was not available). Ethnic status was self-designated, using categories such as : Anglo or white; African or black; Native American; specific Hispanic groups, including Cuban, Puerto Rican, Mexican, or Central American; specific Asian groups, including Cambodian, Vietnamese, Indian, Pakistani, Chinese, Korean, and Pacific Islander; Other; and Mixed Ancestry. The ethnic composition was diverse. Since some of the groups had small numbers, the groups were combined to form three ethnic groups.

Non-Hispanic whites constituted 50.4% of the sample, African American constituted 33.3% of the sample, while 15% formed an "other" category of students. Out of these, 5 participants were Native Americans, 5 Latin Americans, 12 Asian

American/Pacific Islander and 29 were other students from different parts of the world. Information on ethnicity was missing for 7 (1.4%) participants. With regard to marital status, 69.1% were single, 23.3% were married and 4.9% of the participants were either divorced or separated, while marital status information of 2.7% of the participants was missing. Monolinguals in English represented 74.5% of the sample, 17.5% spoke a second language and 2.3% spoke more than two languages. Language information of 5.6% of the total participants was missing. In terms of social class, 20.4% of the participants reported low family income (below \$20,000), 18.7% belonged to middle family income group (between \$20,000- \$35,000), 23.2% belonged to upper-middle income group (between \$35,000-\$50,000), while 32.5% belonged to high family income group (above \$50,000). Family income of 5.3% of the participants was not known. Nearly 75% of the participants were from middle and upper classes. The mean educational level of the parents was 7.63 years (S.D 5.45). The mean educational level of the respondents was 14.49 (S.D 3.94).

Item Selection

The fifty five items of the original instrument were examined for their relevancy by two independent judges familiar with cross-cultural literature. Some items were discarded on the recommendation of these judges as they were considered redundant, unclear, complex in structure and had low factor loadings in preliminary analyses. The inter-rater agreement of .93 was considered satisfactory for retention of final thirty six items for factor analysis.

Procedure

A maximum likelihood factor analysis was used with a promax rotation to obtain the most meaningful patterns of items related to adaptation, using a Scree-test, simplicity of structure and interpretability as criteria. As before, a four factor solution emerged as most meaningful but the present rotation allowed the factor to be correlated as indicated by theory and related research. Two a priori hypotheses were tested. First, since four factors similar to those in the original study were expected, a significant positive correlation between the first factor (pain) and the second (learned helplessness) factor were predicted. Secondly, a negative correlation between both of these factors and the remaining two (positive adaptation and cultural insensitivity). In addition, significant differences were predicted for both gender and ethnicity based on the current literature and the earlier pilot study. Minorities were expected to have higher scores on factor one and lower scores on the cultural insensitivity factor. Females were predicted to be more sensitive culturally than males.

Following the new analysis, an SPSS reliability program was also employed to re-examine the psychometric properties of the instrument. Because cultural adaptation is regarded as a dynamic process where changes are predicted, no test-retest reliability has been sought up to this point. Follow-up tests employing scale scores were related with demographic characteristics including age, gender, ethnicity, family income, educational status of the parents, and number of years of education of the participants.

RESULTS

As a global measure of overall adaptation, an overall Cronbach alpha of .84 was found for the total scale. The four factors that emerged are described next as distinct

indicators of cultural adaptation. Analyses of the resulting factors and their association with ethnicity, age and gender conclude this section. Inter-correlations between the factor scores (Regression-based) and the various demographic characteristics were also examined.

Patterns of Adaptation

The factor analysis produced a 4 factor solution which accounted for 42% of the variance. The goodness of fit Chi square was 878.2, $df=492$, $p < .000$. In Table 2, the four factors, items and their loadings are presented. Factor one, reflects a pattern where there is felt pain and distress. The person feels looked down upon by others, experiences anger caused by others' stereotypes and negative reactions and feels ostracized. Besides being made to feel inferior, the person feels others' hostility and thinks s/he gets a second rate treatment. The person does not feel as if he/she is taken seriously or perceived as capable. The person faces snobbishness and prejudice, feels s/he has to do more than others to prove his/her worth. The person feels alienated and feels that greetings are not often exchanged with him/her. This pattern was called the Pain Factor, as in the earlier study. The remaining factors were also replicated as expected

Pessimism, sadness, lack of control, lack of support and lack of enthusiasm characterized the second factor. This factor was labeled the Learned Helplessness factor and reflects alienation and depression feelings related to social maladjustment.

The third factor loaded on eight items concerning intercultural attitudes toward members of other groups in society. It consisted of items, such as: the person feeling irritated regarding lack of sensitivity to the cultural values of others, blaming some ethnic groups unfairly for their plight and tolerance of foreign accents. This pattern was termed the Cultural Insensitivity factor. In the earlier study, this factor was reversed as the “Bigot” factor.

The fourth factor was characterized by optimism, belongingness to the present culture with a sense of clear identity. The person feels a sense of community with others, feels s/he has deep roots in the country and feels quite adequate functioning in this society. This factor was named “Positive Adaptation” factor, as in the earlier study. In sum, the basic structure of four factors was reproduced with a larger sample, fewer items and a clear structure.

Inter-correlations among different factors

A significant correlation between Factor 1 (Pain scale) and Factor 2 (Learned Helplessness) was found (.47, $n=441$). The correlation between Factor 2 and Factor 4 (Positive Adaptation), was significant and inversely related as expected (-.34, $n=441$). Correlations between Factor 2 and Factor 3, and Factor 1 and Factor 4 were .21 and -.16, respectively although significant statistically, they were of negligible practical importance.

Internal Consistencies of the Four Factor Scales

The Pain Factor scale's Cronbach alpha was .90 based on 12 items. Inter-item correlations averaged .42 with an item mean of 2.9 and a variance of 1.4. The Learned Helplessness Scale had 9 items with a Cronbach alpha of .60. Inter-item correlations averaged .14, with an item mean of 2.5 and a variance of 1.02. The Positive Adaptation factor had 6 items and a Cronbach alpha of .66. The inter-item correlations averaged .24, with items means of 3.7 and a variance of .91. Finally, the Cultural Insensitivity scale had 8 items producing a Cronbach alpha of .66. The mean inter-item correlation was .20, with item means averaging 2.45 with a variance of 1.15. All item alphas reported were standardized. Because cultural adaptation is a fluid reciprocal process, attitudes regarding bigotry are predictably unstable with this a more diverse and larger sample, a separate pre-hoc hypothesis was tested with respect to ethnicity and gender: namely, that minority and female respondents would score significantly different on this factor. Ethnic differences were found for the first three factors.

Socio-demographic Correlates of CAPS Factor Scores

Factor 1 was found to be significantly negatively correlated with age ($r = -.17$, $N = 345$, $p < 0.01$) indicating that with increasing age of students, psychological pain associated with cultural adaptation is lessened. A significant positive correlation was found between Factor 2 (learned helplessness) and age ($r = .11$, $N = 345$, $p < 0.05$) indicating that learned helplessness increased with increasing age.

The education of the respondents was found to be significantly negatively correlated with Factor 1 ($r = -.17$, $N = 312$, $p < 0.01$) indicating that with higher level of education pain may be reduced. A significant negative correlation was obtained between

Factor 3 and gender ($r=-.21$, $N=346$, $p < 0.01$) confirming that females are more culturally sensitive than males. Another correlation found to be significant was between Factor 3 and education of parents of respondents as expected ($r=.21$, $N = 309$, $p < 0.01$).

Correlations obtained for Factors 1 and 4 and number of years of living in the United States ($r= -.17$, $N = 426$, $p < 0.01$; $r=.18$, $N = 426$, $p < 0.01$, respectively) were statistically but not practically significant. Significant negative correlations were obtained between family income and Factors 1 and 2 only ($r= -.15$, $N = 421$, $p < 0.01$; $r= -.12$, $N = 415$, $p < 0.05$, respectively).

CAPS, Ethnicity, Gender and Age

A MANCOVA by ethnicity and gender with SES age as a covariate was employed to examine their relation with the four factors of the CAAS. The results showed no significant interactions. A significant main effect for ethnicity and gender was found at the multivariate level ($F=21.46$, $df = 4,333$, $p < 0.01$ and $F = 3.43$, $df = 4, 333$, $p < 0.01$ respectively) while adjusting for the effect of age. The interaction of gender and ethnicity was not significant nor was gender. Age as a covariate was included in the analysis to control for variability due to age since age was found to be significant ($F=7.22$, $df=4,333$, $p < 0.01$). Follow-up tests on each of the four factors were examined separately and showed that age was significant for Factor 1 ($F= 4.45$, $df= 1, 336$, $p < .05$) and Factor 2 ($F= 7.06$, $df=1,336$, $p < .01$). Ethnicity was significant for Factors 1, 2 and 3 ($F=49.08$, 12.27 & 23.77 , respectively, $df = 1,336$, $p < .001$). A gender effect was significant only in case of Factor 3 ($F= 13.68$, $df=1,336$, $p = 0.01$; see table 3).

Table 3: Ethnic & Gender Differences in Cultural Adaptation

		Pain	Learned Helplessness	Cultural Sensitivity	Positive Adaptation
Majority	M	-.44	-.18	.35	.11
	F	-.54	-.33	-.12	.17
	Total	-.50	-.27	.07	.14
Minority	M	.34	.14	-.25	-.08
	F	.28	.02	-.52	.07
	Total	.30	.06	-.43	.02

DISCUSSION

This study provides a way to assess the adaptation of persons in their current socio-cultural context. It suggests that after gender and age are accounted for strong ethnic differences remain in adaptation. The alienation and social mistreatment reported in the scale's first factor are not necessarily an index of personal maladjustment but perhaps more of distance and inter-conflict in a cultural context. At the individual level, the group effects reflect on interpersonal patterns with others, mainly in the majority school culture. Scores may also reflect the level of "maladjustment" and tension found in some social contexts that historically have been lacking in social justice (Portes, 1996). As expected, these four patterns of adaptation are comprised by scales that generally are sensitive to ethnic, social class, age, and gender effects. From a socio-cultural perspective, the scores of the first scale may capture not only the extent of alienation and discrimination a person finds herself in, but also tells a story about social conditions encountered and of how the person (and cultural group) has adapted to a particular socio-cultural context and how the latter tends to respond to person's characteristic and those of his/her group in general. Consequently, this sub-scale may be useful in assessing the degree of risk, or alienation by individuals in inter-cultural adaptation. It provides a measure that may be used in gauging the effectiveness of various types of educational interventions regarding diversity. African-Americans reported the most pain and Non-Hispanic Whites the least.

The CAAS appears as a promising instrument that is internally consistent and has established both face and content validity. It reflects separate patterns of adaptation to social condition that denote fluid states that may be subject to change. Adequate internal consistency was found given that extremely high alpha coefficients introduce redundancy

and limit the range of the scale. Helplessness is distinct from pain and both are related to a third pattern of positive adaptation. While each is modestly related to the others, each reflects a distinct aspect of adaptation.

The cultural insensitivity factor appears useful as a scale. Given the relatively low internal consistency of items associated with ethnocentrism our explanation for the low reliability here lies in that some respondents may not be consistent in sharing politically incorrect, ethnocentric attitudes. While this is true respondents particularly in minority groups may respond more consistently when items focusing on prejudice and cultural insensitivity are present. It may be useful nevertheless in assessing how much variability may be present in a particular group for prejudice reduction programs.

Indices of Cultural Adaptation

How well a person feels they are well-adjusted in a social context is an important aspect of mental health. If group differences are significantly greater than individual differences, both in terms of central tendency and variability, valuable information may be yielded by this instrument as well. For example, the first factor scale assesses adaptation along a bipolar dimension extending from alienation to positive acculturation and varies significantly by ethnicity. However, the Learned Helplessness factor appears *consequent* of the first. It would seem that learned helplessness results from extended exposure to cultural pain by some minorities. However, a casual relation may be not justified presently and will be examined as this research evolves. This is because the first factor is not correlated with learned helplessness, a scale that addresses in part the syndrome as first studied by Seligman (1962). This aspect of cultural adaptation may be

regarded in terms of different worldviews that are held by both monocultural and some multicultural persons in a diverse population. That is, some of the individuals who score high on the Pain scale may or may not score high on the second or other factors depending on both ethnicity and individual vulnerability. Many of the respondents may feel cultural pain but also “fight back”. Contrariwise, some who do not score high on the pain scale may report learned helplessness. In order to tease out such hypothesis, subsequent studies are required.

The Positive Adaptation sub scale also provides a useful measure. It would seem that this scale reflects the normative adaptation of monocultural persons who are more or less subject to the other measures of adaptation and face less cultural stress. It may be predicted to correlate with independent measures of psychological adjustment, including positive self-esteem. This factor may be employed for research and clinically to assess positive adjustment and health amidst inter-cultural contact. Its low alpha may be due again to calculations that employ the total sample. Post-hoc analyses of these data were performed to examine the alpha coefficients for majority and minority groups separately for each factor.

Overall, three of the factors and the overall score, serve as reliable and valid indicators of cultural adaptation and well being. The cultural insensitivity factor, because of its low reliability, justifies future research that focuses greater attention on group differences and ethnocentrism.

In sum, the CAAS advances our understanding of cultural adaptation and offers a reliable, meaningful assessment tool. The individual scales may serve as both dependent

and independent measures in future research. Further validation may also contribute to a better discernment of vulnerability to stress, retention of college students and response to treatment. The CAPS may prove helpful in multicultural counseling as it provides a way to assess both person and context factors. The extent to which the adaptation scales are related to demographic and adjustment variables requires further research attention. Such research will "tell the story" of cultural and historical factors and their impact on development and adaptation. In closing, the study can contribute heuristically to a better conceptual analysis of person – context, transactional or dialectical models in the field.

Several limitations exist that will need to be addressed in the future. Other validation research with cultural groups and standardized criterion measures are needed. Validation through the use of qualitative interviews and sampling in other countries and various immigrant groups are some of the many directions for future programmatic research in this area in addition to those related to nationalism, a global perspective, political identity and inter-group relations.

TABLE 2: FACTOR PATTERN LOADINGS

Factor 1 (Pain)

Feel looked down upon	.78
Others act as if they are better	.77

Feel others try to make them feel different	.72
Feel some groups have hostility towards them	.69
Feel angry about the stereotypes and negative reactions people have about them	.67
Feel ostracized by some people	.66
Feel they are required to do more than others to prove their abilities	.65
Feel treated as a second rate citizen	.62
Feel often considered less capable than what they really are	.62
Feel they are often not taken seriously	.62
Suffer from prejudice and unequal treatment	.61

Feel they have been denied opportunities they deserve

.51

Factor 2 (LEARNED HELPLESSNESS)

Feel that despite all the efforts they will not be able to succeed in this society

.80

Feel choices for success in life are limited .67

Feel that if they try to work hard, they'll have a good future -

.65

Feel they do not have as many choices as others around them	.61
Feel trying hard to get ahead doesn't work for people like them	-.54
Feel can get ahead in life as well as anyone else	-.54
Feel don't have much control over life	.48
Feel a sense of helplessness and hopelessness	.47
Feel many opportunities are denied to them	.44

Factor 3 (Cultural Insensitivity)

Feel it is fair to blame some ethnic groups for their plight	.59
Do not get bothered when people use ethnic/racial slurs	.55
Feel amused when people make fun of cultural stereotypes	.55
Get impatient when can't understand a different accent	.54
Feel that gender is more important to them than their culture	.51
Feel irritated when people are insensitive to the cultural values	-.52
Feel bothered when minority groups take unfair advantage of others	.49
Feel uncomfortable with people's cultural values	.48

Factor 4 (Positive Adaptation)

Feel they belong in the present culture	.71
Feel they have a clear identity in this culture	.60
Feel a sense of community with others	.58
Feel adequate functioning in this society	.54
Feel they have deep roots in this country	.50
Feel it is useful to have high hopes in this society	.43

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