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Differences in acculturation and trajectories of anxiety and alcohol consumption among Latino mothers and daughters in South Florida

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Abstract

This study documents generational differences in the impact of acculturation related factors on anxiety and alcohol use behaviors between adult Latino mothers and adult daughters. Findings indicate that for mothers (n=144) and daughters (n=149), self-reported anxiety levels decreased from baseline to follow up ($p=.001$). For mothers at follow up (n=147), results indicate that affiliation to Latino culture is negatively associated with anxiety ($p=.018$). Conversely, employment and partner relationship stress are positively associated with anxiety ($p=.05$ and $p=.016$ respectively). In addition, self-reported anxiety is positively associated with alcohol intake ($p=.002$) and employment ($p=.007$). For daughters (n=149), partner relationship stressors, anxiety and alcohol intake decreased significantly from baseline to follow up at a $p=.01$, $p=.01$, $p=.05$ respectively. In addition, for daughters at baseline (n=160), affiliation to U.S. culture is positively associated with self-reported anxiety ($p=.01$). Employment is negatively associated with alcohol consumption ($p=.027$). At follow up (n=152), daughters' partner relationship stress is positively associated with self-reported anxiety ($p=.049$). Findings in this study can be used to develop culturally appropriate interventions, support groups and individual therapy sessions by taking into consideration generational differences among Latino women.

Introduction

The process of acculturation plays an important role in explaining mental health and alcohol consumption among minorities, especially given the stress of adapting to a new social and cultural context [1]. Acculturation is defined as the process of social and psychological exchanges that take place when there are ongoing interactions between individuals of different cultures, with subsequent changes in either or both groups [2]. Acculturation occurs when individuals immigrate from their country of origin to a new host country. During the acculturation process, stressors associated with new institutions such as schools, social service agencies and workplaces may contribute to high levels of anxiety among the Latino immigrant population [3, 4]. In addition, Latinos may be at higher risk of alcohol consumption while acculturating into the new values and beliefs of the mainstream culture [1, 4]. Within this perspective, the acculturation process can be seen as a predictor of mental health status among recently immigrated Latinos; by increasing anxiety levels, it may affect the likelihood of alcohol consumption [5]. Relationship stressors which can also influence anxiety, especially among Latino women [6, 7]. A considerable amount of research has examined gaps in parental-child acculturation levels as predictors of strained family relations, increased anxiety and substance use behaviors [3, 4, 6, 7]. However, the bulk of these studies have been conducted with adolescents [8, 9]. Far less is known regarding the dynamics of these constructs among adult Latino women [10]. The present exploratory study examines how the role of acculturation and relationship stressors differentially influence levels of anxiety and substance use among adult Latino mothers and their adult daughters.

Acculturation

Acculturation is an interactive process whereby immigrants adapt to a new culture while they continue to affiliate with their native culture. These adaptations entail psychosocial changes that result from individuals being exposed to the new values and cultural beliefs of the host country [11-13]. Part of the adaptation requires to some extent learning a new language, understanding how institutions work, and observing behaviors that are desirable versus those that are undesirable for adaptively functioning within a new culture [12, 14]. The classical definition of acculturation is “acculturation comprehends those phenomenon which results when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” ([15] p. 149). Acculturation entails the social and psychological exchanges that take place between individuals from different cultures. These changes can be observed across a number of different domains such as attitudes, values, behaviors, and a sense of cultural identity [12]. Acculturation has been conceptualized as a bi-directional process, where change may occur in either the dominant or minority group, or in both. In essence, it involves the exchange of cultural features that results when groups of individuals having different cultures come into direct contact with each other. This contact can lead to altered cultural patterns in either or both groups[2]. As such it can include the extent to which recent immigrants maintain their values/attitudes and familiarity of their home country culture as well as how they interact with the values/attitudes of the host country culture [16].

Several factors have been associated with acculturation, including generational status, length of residence in the United States, and whether or not an individual is foreign-born or U.S. born [17]. As such, the acculturation process can differ among family members within a single household. Previous research has shown that Latino youth and children tend to acculturate into American culture and acquire English proficiency at a faster rate than their parents [18, 19]. This may be attributed to Latino youth and children's participation in the educational system upon arrival to the United States, where as their parents may not have as much direct and frequent exposure to such institutions [20]. As a result, the adaptation process to American culture is slower for older Latinos, which may lead to heightened levels of anxiety, and in turn increase the likelihood of alcohol consumption [21, 22].

Relationship stressors

The quality of spousal/partner relationships can affect the level of stress among women, particularly among women with strong affiliation to Latino cultural beliefs and values [7]. For Latina women, relationship stressors can originate from prescribed gender roles that places higher relationship demands on women in comparison to their male partners [25]. For the purpose of our study, relationship stressors are defined as indicators related to relationship behaviors such as showing affection, relationship's expectations and individuals' freedom.

Anxiety and alcohol consumption among Latino women

Anxiety has been linked with acculturation, especially for adult Latino women with lower levels of acculturation, such as those with strong affiliation of traditional Latino beliefs and values and those reporting Spanish as their preferred language preference at home [29]. In addition, acculturation related stress has been found to be associated with anxiety in undergraduate college students with Latino origins [30]. In fact, Latino youth tend to have higher levels of anxiety than whites [31, 32]. Regarding alcohol consumption, there is vast research linking higher levels of acculturation with increased alcohol consumption among Latinos [33, 34]. This correlation between alcohol consumption and acculturation tends to be stronger in Latino women than men [21]. Overall, Latino men have a higher prevalence of alcohol use compared to women [35]. The effects of acculturation on alcohol use have been found to have a stronger influence on the drinking behaviors of women, and thus lead to a closing of the gap in alcohol use between genders [21, 36]. Although research on both anxiety and alcohol consumption has been widely studied, little is known about generational differences between younger and adult Latino women [10]. Hence, the purpose of this paper is to explore whether affiliation to Latino culture, affiliation to the U.S. culture and relationship stress predicts anxiety and alcohol consumption among a cohort of Latino adult mothers and daughters participating in a longitudinal study funded by the National Institute of Nursing Research at the National Institutes of Health. This study aims to shed light on the differences in the acculturation process between Latino mothers and daughters which can contribute in the culturally and age appropriate interventions to ease anxiety associated with acculturation processes among foreign born as well as U.S born Latino women.

Methods

Measures

A multidimensional instrument assessing cultural identity among Latinos was used to measure acculturation [12]. Items from the Familiarity with Latino Culture and Familiarity with American Culture scales ask respondents to rate their agreement with each item on a four-point Likert scale (1= I don't know anything about these; 2= I know very little about these; 3= I know something about these; 4= I know a lot about these), with a total scale range of 4 to 16 on both scales. Items from each scale specifically ask participants' familiarity with (a) fine art and artists, (b) history and politics, and (c) cultural legends and symbols of their Latin American country and of the United States, respectively. Cronbach's alpha reliability estimates of .78 (mothers) and .80 (daughters) were found for Familiarity with American Culture scale within this sample [12].

Chronic stressors in participants' lives were measured using a modified version of the chronic stress scale from a survey designed to assess health risk behaviors among young adults [37]. Items from this scale included questions such as "Your relationship restricts your freedom; Your partner doesn't show enough affection; Your partner expects too much of you." A 3-point likert scale was used to rate respondents' agreement (1=not true; 2=somewhat true; and 3=very true). A total score was computed with high scores indicating high levels of stress. Cronbach's alpha coefficients were .88 for daughters and .87 for mothers of this sample.

The alcohol consumption items from the *Health and Daily Living Form* [38] were used to assess participant alcohol use frequency during the 12 months prior to assessment at each of the assessment time points. Three questions assessed how frequently participants consumed beer, liquor, and/or wine during the 12 months prior to assessment using an 8-point Likert scale ranging from 1 (*never uses*) to 8 (*uses every day*). Questions included : How often did you drink beer during the last 12 months? Anxiety was reported by indicating whether the participant experienced anxiety in the last 30 days. Responses were group using a dichotomous variable. In the same manner, a question whether or not participants were employed was also documented using dichotomous variable. Lastly English proficiency was measured by calculating an average of Likert scale scores (1=not at all; 2=fair; 3 =good; 4=excellent) of how well participants speak, read and write English.

Sampling methods

A convenience sample (N=320) of mothers and daughters residing in Miami-Dade county were recruited during baseline (T1) via using a snowball sampling (chain referral) method [39]. Baseline participants were recruited using community outreach, newspapers adds, local radio announcements, and visiting drug courts, churches, and narcotic anonymous groups. Participants are enrolled in an ongoing longitudinal study. The inclusion criteria for the study included: (a) consenting to be interviewed for at least 2-3 hours; (b) being 18 years of age or older; (c) self-identifying as Latina; (c) living in Miami-Dade County, Florida; and (d) willingness to provide two telephone numbers (her own, a friend's or family member's) to researchers for correspondence during participation in study. In the first follow up (T2) ,

five years later, 299 women were relocated using word of mouth, telephone calls, community outreach, and leaving fliers in the community based organizations. Eight trained Latina bilingual interviewers with at least a bachelor's degree conducted the Spanish and English interviews. The interviews consisted of quantitative data collection only. The interview took 1-2 hours during baseline and follow up to complete and participants received a \$50.00 stipend at both times. The study was approved by, and conducted in compliance with the Institutional Review Board at a large south Florida University.

Analysis: Structural equation modeling

Structural equation model (SEM) was used to evaluate the causal association between observed and latent variables[40]. SEM offers several benefits such as the ability to estimate the relationship between variables and the relationship between indicators and their constructs. It also gives flexibility to test researchers' choice of models [41]. SEM calculates the influence that percentage change in independent variables have over dependent ones [42]. Finally, SEM has been used in evidence based frameworks on acculturation[43, 44].

In this study, the independent variables included: a) affiliation to Latino culture, b) affiliation to American culture, and c) partner relationship stressors. The dependent variables were: a) lifetime self-reported anxiety and b) alcohol consumption during the last 12 months. English proficiency and employment were included as control variables in the model.

The model was tested first for mothers and then for daughters to identify differences between these two groups. A variety of global fit indices were used in assessing the adequacy of this model. These included: (a) a low Chi-Square, (b) the Minimum Discrepancy divided by the Degree of Freedom (CMIN/DF), (c) Non-Normed Fit Index (TLI), (d) Incremental Fit Index (IFI), (e) Comparative Fit Index (CFI) and (f) Root Mean Square Error of Approximation (RMSEA) [45, 46]. Bivariate correlations were also conducted between independent variables. Multicollinearity between predictors were not found as correlations were lower than .9 [47]. Multiple group analysis was used to test differences between mothers and daughters.

Results

Table 1 shows the demographic characteristics of participants at baseline. The average age of mothers is 25 years older than the daughter group. Participants' age for mothers range from 41 to 97 and participants' age for daughters range from 26 to 63 years of age. In addition, most mothers (41%) are Caribbean-born and most daughters (46%) were born in the United States. Furthermore, 81% of daughters reported to be English-proficient compared to 41% of mothers. Lastly, both mothers and daughters had a similar education breakdown.

Table 2 shows descriptive statistics for mothers comparing baseline and follow up data. Findings indicate that from baseline to five-year follow-up Latino culture affiliation and affiliation to American culture slightly increased. Findings show that level of anxiety from baseline to follow up decreased considerably at a $p = .000$.

Table 3 shows descriptive statistics for main constructs of this study for the daughters only. Partner relationship stressors, anxiety and alcohol intake decreased significantly from baseline to follow up at a $p = .01$, $p = .01$, $p = .05$ respectively.

Table 4 shows the covariance, which indicates regression coefficients, or strength of association between dependent and independent variables of the mothers' group. These findings only show data for the follow up model. Data from the baseline model could not be validated as the model did not fit well with the data. Results indicate that affiliation to Latino culture is negatively associated with anxiety ($p = .018$). Conversely, employment and partner relationship stress are positively associated with anxiety ($p = .05$ and $p = .016$ respectively). Cultural predictors accounted for 10% of variance in self-reported anxiety. In addition, self-reported anxiety is positively associated with alcohol intake ($p = .002$) and employment ($p = .007$). Self-reported anxiety accounted for 10% of variance in alcohol intake. This model was validated as shown in table 5.

Table 6 shows covariance model (regression coefficients) for daughters at baseline and follow up. At baseline, affiliation to U.S. culture is positively associated with self-reported anxiety ($p = .01$). In addition, employment is negatively associated with alcohol consumption ($p = .027$). Cultural predictors accounted for 7% of variance in self-reported anxiety. At follow up, partner relationship stress is positively associated with self-reported anxiety ($p = .049$). In time 2, cultural predictors accounted for 5% of variance in self-reported anxiety. This model was validated as shown in Table 7.

Discussion

This study expands the literature on how acculturation and relationship stressors differentially influence levels of anxiety and alcohol use between adult Latino mothers and daughters. Results revealed that for both mothers and daughters, there was a decrease in self-reported anxiety from baseline (T1) to the five year follow up (T2). This finding may be attributed to Latino women becoming better adjusted to American life, as both mothers and daughters reported a slight increase in affiliation to American culture from baseline to follow up. Another factor that drives the reduced levels of anxiety may be an improved economic situation that mothers may have experienced as their time in the U.S. increased. Regarding daughters, this finding can indicate that, although daughters were born in the US, they may have been raised with strong cultural ties to their Latino culture partially imparted by their mothers. However, anxiety levels may have also decreased when daughters started interaction with the American culture such as through attending school or working.

Although the covariance model could not be validated at baseline (T1) for mothers, findings revealed that at follow up (T2), lower affiliation to Latino culture was linked with higher levels of anxiety. This finding falls in line with previous research suggesting that cultural traditions among Latino immigrant families may be stronger in older compared to younger generation, as such, leading to increased anxiety levels as the cultural traditions of older individuals are compromised [29]. For instance, among the mothers subsample, the fact that they are living in another country may create a feeling of nostalgia by not being close to their traditions and cultural roots and, in turn, creates increased levels of anxiety.

Another predictor of anxiety was partner relationship stress measured by affection, relationship's expectation and individuals' freedom. Cultural dynamics during acculturation processes may have placed more stress on mother's relationships with their significant others. For instance, *Marianismo*, prescribes that the appropriate behavior of Latino women are expected to be submissive, selfless, dependent, and accept the primary responsibility of taking care of the children, spouse and household [48, 49]. Although marianismo is often questioned by some younger Latinas born in the U.S., it generally remains an important component of Latino cultural expectations [50]

Expectations based on traditional Latino gender roles may result in women experiencing increased levels of stress from attempting to balance household responsibilities with careers goals [26, 51, 52]. Hence, in the Latino women may have internal conflicts when attempting to balance new opportunities while maintaining behaviors of submissive. This is not to say that the traditional gender role themselves create cultural relationship stressors. Previous studies of marital satisfaction have found that when both spouses highly value traditional gender roles in a relationship, then satisfaction with this shared value can lead to overall relationship satisfaction [54]. Thus, Latino women who highly respect cultural values, and have a shared sense of satisfaction of these values with their partners, can potentially experience greater satisfaction within their relationship.

In turn, pressures resulting from the conflicting views within a relationship may generate an increased level of anxiety, and undesirable behaviors such as alcohol consumption. National studies such as the National Latino and Asian American Study (NLAAS) have found family conflict and burden to be predictors of mood disorders and substance use behaviors among Latinos [55, 56]. Noteworthy findings from the NLAAS data reveal gender specific associations between negative family interaction and anxiety with this relationship being significant for Latino women, but not men [35]

Lack of employment was also associated with self-reported anxiety. As anticipated, a lack of economic stability could contribute to high levels of anxiety among mothers. However, when employed, mothers also tended to consume more alcohol. These findings are in line with previous research linking higher income to increased levels of alcohol use among Latino immigrants [57]. It has been postulated that greater economic means to support unhealthy behaviors such as purchasing alcoholic beverages could be linked to this association [57]. Additionally, self-reported anxiety was associated with alcohol consumption, a relation found in previous studies[58-60].

As opposed to their mothers, daughters' affiliation to American culture was found to be positively associated with self-reported anxiety at baseline. These results are consistent with previous study findings suggesting exposure to American culture may elevate Latino women's likelihood of experiencing mental health problems through such stressors as exposure to discrimination, acculturation processes, and poverty [61]. Although most daughters were born in the U.S., affiliation to American culture may be limited due to strong Latino cultural ties learned during their upbringing and living in predominantly Latino enclaves such as those commonly found in South Florida. However, interaction with American cultural and educational systems may increase level of anxiety, as younger

generations are required to learn new values and beliefs to properly function in American society. Unlike their mothers, for daughters, lack of employment increased the likelihood of drinking alcohol. This association could be related to one-hypothesis proposed in the literature involving U.S. cultural conventions of self-medicating as a way of coping with hardship [62].

As with mothers, daughters' partner relationship stress was associated with self-reported anxiety. This could result from traditional norms passed down by their parents that influence the relationships between daughters and their partners. Lastly, partner relationship stressors and alcohol consumption decreased from baseline (T1) to follow up (T2), a finding that may be associated with the reduction in levels of anxiety.

Limitations

Our findings should be evaluated in the context of several limitations. First, is the use of a sample of convenience via snowball sampling. As part of research design of the original investigation, substance abusing Latino women through drug court, Narcotics Anonymous meetings, various media outlets, and chain referral. Although these sampling techniques may introduce bias through limiting the generalizability of the study through nonrandom sampling, it is a preferred method when recruiting hard to reach populations such as substance abusing Latino women, an inclusion criteria for a portion of the original study sample. Yet another limitation is the use of self-report measures making the design susceptible to socially desirable responses.

The present investigation utilized secondary data analyses from an ongoing longitudinal investigation examining the influence of attachment on the inter-generational transmission of substance abuse and HIV risk behaviors among Latino mothers and daughters. Thus, validated measures for the present exploratory study were not possible. For instance, given that anxiety was not a primary construct in the original study, no formal validated anxiety measure was utilized. Future research should consider using psychometrically sound mental health scales previously validated with Latinos such as the Composite Interactional Diagnostic Interview (CIDI) developed by the World Health Organization World Mental Health Survey Initiative [63]. Furthermore, acculturation was only measured as familiarity with cultural norms and values for both country of origin and the American society. Future studies should also include existing validated measures of Latino cultural values such as traditional gender roles. While the concepts of *machismo* and *marianismo* have been studied and measured [51], they have not been found to be predictive or explanatory of relational stress. These traditional concepts should be examined within an updated framework of acculturation that varies by context and construct. [51]. Lastly, sample size may be a limitation when conducting SEM analysis. However, in terms of asymptotic theory and covariance stability, simulation studies tend to suggest that sample sizes of 100 to 125 or larger often yield adequate results given that reasonably reliable measures are used (reliabilities greater than 0.65) and with a reasonable number of indicators per latent variable [64-66].

Although outside the scope of this study, future investigations with larger sample sizes should attempt to identify variations in the presently examined constructs by Latino ethnic

subgroup. Previous research has found heterogeneity in the prevalence of mental health and substance use by Latinos by subgroups (i.e., Mexican, Puerto Rican, Cuban, and Other Latino) [67]. Lower rates of anxiety and substance use disorders have been reported among foreign-born compared to U.S. born Latinos. These findings are consistent with the “immigrant paradox,” i.e. that foreign born nativity is protective against various negative health outcomes despite the stressors and poverty often associated with the immigration experience [68]. However, when stratified by Latino ethnic subgroups the immigrant paradox holds consistently for Mexicans for both anxiety and substance use, while only evident among Cubans and other Latino subgroups for substance use disorders [67]. This protective impact of foreign nativity could be related to strong social controls against substance use in Latino Immigrant's countries of origin [69].

Findings of this study shed light on generational differences in the cultural predictors of anxiety and alcohol consumption among Latino women. Understanding the complex acculturative process in which Latino immigrants find themselves while interacting within two distinct cultures is important, particularly in the context of providing prevention/intervention services with this population. A documented increase in the use of mental health services by Latinos underscores for service providers to understand the evolving cultural values that may serve as risk and protective factors for negative physical and mental health outcomes in this population [55]. The present exploratory study lays the groundwork for future research aimed at developing interventions focused risk factors such as anxiety and substance use among adult Latino women. Such culturally informed research and interventions also may help to identify additional contextual and interpersonal factors affecting the mental health and substance use behaviors of Latino women across ages and acculturation levels. These findings suggest the need for interventions that are sensitive to Latino norms as values such as traditional gender role expectations and acculturation-related factors. This study is exploratory in nature. The predictors identified may partially explain the causes of self-reported anxiety during the acculturation processes. Further research is needed to explore how the acculturation process differentially influences the attitudes, beliefs, and behaviors of younger and older Latino generations[21].

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Figure 1.
Covariance model

Table 1

Demographics at baseline (n=320)

	Mothers	Daughters
Age (mean)	60	35
Place of birth		
-Born in the United States	16% (n=26)	46.3% (n=74)
-Caribbean born	41% (n=65)	20% (n=32)
-Central American born	13% (n=20)	12% (n=19)
-South American born	31% (n=49)	22% (n=35)
Education		
-Less than high school	29% (n=47)	25% (n=40)
-High school diploma	16% (n=25)	16% (n=25)
-GED	6% (n=9)	3.8% (n=6)
-Some training/college	28% (n=45)	37.5% (n=60)
-Bachelor	16% (n=26)	16% (n=25)
Graduate school	1% (n=1)	2.5% (n=4)

Table 2

Descriptive changes - Mothers only (n=144)

	Baseline			First Follow up		
	Mean	Std. Deviation	Variance	Mean	Std. Deviation	Variance
Affiliation to Latino culture	2.81	0.81	0.66	2.83	0.77	0.6
Affiliation to American culture	2.65	0.73	0.54	2.72	0.72	0.52
Partner relationship stress	1.57	0.56	0.25	1.46	0.58	0.32
Self-reported Anxiety	0.715	0.45	0.2	0.5	0.5	0.25
Alcohol intake	1.18	0.39	0.15	1.22	0.41	0.17

Table 3

Descriptive changes-Daughters only (n=149)

	Baseline			First Follow up		
	Mean	Std. Deviation	Variance	Mean	Std. Deviation	Variance
Affiliation to Latino culture	2.58	0.79	0.63	2.53	0.82	0.68
Affiliation to American culture	2.9	0.71	0.58	2.93	0.72	0.53
Partner relationship stress	1.56	0.61	0.73	1.34	0.45	0.2
Self-reported Anxiety	0.68	0.46	0.21	0.49	0.5	0.25
Alcohol intake	1.29	0.45	0.21	1.21	0.41	0.17

Table 4

Regression coefficients at follow up - Mothers only

			Estimate	S.E.	C.R.	P
Anxylife#	<---	Affiliation U.S. culture	0.141	0.093	1.409	0.159
Anxylife#	<---	Affiliation Latino culture	-0.256	0.127	-2.36	0.018
Anxylife#	<---	Employment	-0.152	0.08	-1.961	0.05
Anxylife#	<---	English_proficiency	0.125	0.036	1.613	0.107
Anxylife#	<---	Relationship_Stress	0.202	0.068	2.415	0.016
Alcohol_int	<---	Anxiety	0.251	0.067	3.131	0.002
Alcohol_int	<---	Employment	0.214	0.068	2.683	0.007
Alcohol_int	<---	English_proficiency	0.032	0.03	0.401	0.688

Table 5

Goodness of fit statistics for revised model follow up – Mothers only

Index	Criterion	Revised Model Follow Up
Chi-square ($\times 2$)	Low	Low
Degrees Of Freedom (df)	0	85
Likelihood Ratio ($\times 2$ /df)	< 4.0	1.33
Tucker Lewis Index (TLI)	> 0.90	0.94
Comparative Fit Index (CFI)	> 0.90	0.95
Incremental Fit Index (IFI)	> 0.90	0.95
Root Mean Square Error Of Approximation (RMSEA)	0.05	0.048

Table 6

Regression coefficients at baseline and follow up - Daughters only

		Estimate	S.E.	Baseline C.R.	P	Estimate	Follow up S.E.	C.R.	P
Anxylife#	<---	0.226	0.069	2.559	0.01	0.033	0.072	0.393	0.694
Anxylife#	<---	0.108	0.054	1.276	0.202	-0.045	0.074	-0.515	0.606
Anxylife#	<---	-0.005	0.073	-0.061	0.952	0.11	0.082	1.381	0.167
Anxylife#	<---	-0.018	0.036	-0.229	0.819	0.076	0.042	0.956	0.339
Anxylife#	<---	0.055	0.083	0.668	0.504	0.17	0.078	1.971	0.049
Alcohol_consus	<---	-0.022	0.076	-0.288	0.774	0.08	0.068	0.982	0.326
Alcohol_consus	<---	-0.171	0.072	-2.208	0.027	-0.047	0.07	-0.574	0.566
Alcohol_consus	<---	-0.117	0.036	-1.507	0.132	-0.005	0.036	-0.055	0.956

Table 7

Goodness of fit statistics for revised model at baseline and follow up – Daughters only

Index	Criterion	Revised model-Baseline	Revised model-Follow up
Chi-square ($\times 2$)	Low	Low	Low
Degrees Of Freedom (df)	0	13	25
Likelihood Ratio ($\times 2 / df$)	< 4.0	1.1	1.69
Tucker Lewis Index (TLI)	> 0.90	0.989	0.91
Comparative Fit Index (CFI)	> 0.90	0.993	0.94
Incremental Fit Index (IFI)	> 0.90	0.994	0.94
Root Mean Square Error Of Approximation (RMSEA)	0.05	0.026	0.068