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Mothers of Young Adults with Intellectual Disability: Multiple Roles, Ethnicity, and Well-Being

Abstract

Background—Two opposing perspectives--role strain and role enhancement—were considered as predictive of women's psychological and physical health. The authors examined the relation between multiple role occupancy (parenting, employment, marriage) and well-being (depression and health) among mothers of young adults with intellectual disability (ID).

Method—Participants were 226 mothers aged 35-70 years caring for a young adult aged 16-26 years with moderate to severe/profound ID. Mothers were either of Latino ethnicity (n=117) or Anglo (n=109). Mothers' ethnicity and degree of acculturation and young adults' adaptive behaviour and behaviour problems were examined as potential moderators.

Results—Mothers who were employed, married, or both reported better well-being than mothers who were both unemployed and unmarried, especially when their offspring had relatively higher adaptive functioning. This relationship between role occupancy and well-being was fully mediated by socio-economic (SES) factors. Results did not suggest a role enhancement effect, but instead indicated a role shortage effect; unemployed, unmarried mothers experienced markedly poor well-being, while all other mothers experienced comparable well-being. Well-being scores were higher for Anglo than for Latino mothers; this relationship was entirely accounted for by SES. In Latina mothers, the relation between role occupancy and well-being was moderated by degree of acculturation.

Conclusions—Findings suggest that multiple roles benefit mothers of young adults with ID primarily through their impact on socio-economic resources. For more acculturated Latina mothers, occupying more roles predicted better well-being even after controlling for SES. Latina mothers who were unemployed and unmarried had lower SES, and this group emerged as at particular risk. The latter group may benefit most from respite assistance and other interventions aimed at addressing their physical and mental health.

The increased entrance of mothers into the work force in recent decades has given rise to a surge of research on work and family roles and their influence on women's well-being (Repetti 1998). Extensive research has examined the impact of motherhood, employment, and marriage, and suggests that occupying multiple roles confers both benefits and risks to women's mental and physical well-being (Baruch & Barnett 1986; Perry-Jenkins *et al.* 2000). However, these relationships have rarely been assessed among mothers of children and adults with intellectual disability (ID), or among Latina mothers. The current study assesses the relationships between socio-economic resources, role occupancy, ethnicity, and well-being among Anglo and Latina mothers of young adults with ID.

Well-being among mothers of persons with ID

Mothers of individuals with ID face heightened stress and depression (Baker *et al.* 1997; Olsson & Hwang 2001). In particular, these mothers experience stress in the childrearing domain, including difficulty finding reliable child care (Warfield & Hauser-Cram 1996), disruption of family plans (Rodrigue *et al.* 1990), financial burden (Gunn & Berry 1987), and restrictions on social activities (Donenberg & Baker 1993). Furthermore, the transition to adulthood--the period examined in the current study--is postulated to be a period of particular stress for individuals with ID and their families (Blacher 2001). For example,

Ferguson, Ferguson, and Jones (1988) found this transition to be uniquely stressful for families because of the uncoordinated and often insufficient services available after public schooling ends, complicating employment opportunities for mothers. The current study explores whether these mothers, who are at increased well-being risk during their young adults' transition, benefit from engagement in other roles beyond motherhood, specifically employment and marriage.

Multiple roles research

In general, research on women's multiple roles has centered around two competing theories. The *role enhancement hypothesis* argues that multiple roles bring psychosocial benefits to women (Repetti *et al.* 1989), through increased social support and contact, self-esteem, and mastery (e.g. Marks 1977). Multiple role occupancy can also be a source of increased financial resources, through job earnings or a spouse's financial contributions. Most studies suggest that employment is associated with positive adjustment (Repetti *et al.* 1989), including reduced depression, better physical health, and less frustration (Baker & North 1999; Fokkema 2002; Lahelma *et al.* 2002), and suggest that number of roles has a cumulative, positive effect on women's long-term health and longevity (e.g. Moen *et al.* 1992). On the other hand, the *role strain hypothesis* suggests that pressures and demands associated with multiple roles may exhaust women's personal resources and negatively affect physical and mental health (Marks 1998; Marks 1977). There is less evidence to support this hypothesis, though parents have been shown to report more dissatisfactions, worries, and depression than non-parents (Umberson 1989). One study found that occupying multiple roles, including mother, spouse, and employee, had a negative impact on women's daily mood states (Williams *et al.* 1991). Overall, the evidence supporting both hypotheses suggests the importance of potential moderating factors (Repetti 1998).

Multiple roles research among mothers of persons with ID

Mothers of individuals with ID experience less job stability and lower income and social participation than mothers of typically developing individuals (Seltzer *et al.* 2001; Parish *et al.* 2004). Few studies of mothers of individuals with ID have focused specifically on the impact of role occupancy on well-being. These studies generally supported the role enhancement hypothesis (Chen *et al.* 2001; Einam & Cuskelly 2002; Freedman *et al.* 1995). Most research has not controlled for socio-economic status (SES) variables (e.g. Einam & Cuskelly, 2002; Freedman *et al.* 1995; Gottlieb, 1997); thus, these studies do not assess whether the benefits of multiple roles are due to associated increases in socio-economic resources.

Among older mothers raising adults with ID, Hong and Seltzer (1995) found that multiple roles, including employment, marriage, social and family contacts, or parenting additional offspring, predicted decreased depression over time, even after controlling for income and education. Too, Gottlieb (1997) found support for a role accumulation hypothesis among single mothers of children with ID; mothers who had three roles--involvement with an intimate partner, employment, and motherhood--experienced less depression and better health than single mothers who were unemployed and without an intimate partner.

Contrasting literature suggests that mothers of children with ID are particularly susceptible to role strain, missing more work due to child-care responsibilities, child mental health problems, specialized treatment needs, and frequent doctor visits (Neal *et al.* 1993). Among low-income women, Morris and Coley (2004) found that employment and parenthood were associated with role strain when certain depleting factors were present, including raising a disabled child, multiple young children, and long work hours. None of these earlier studies pertained to a young adult sample with ID homogeneous in age and adaptive functioning.

Behaviour problems and adaptive behaviour among individuals with ID

Individuals with ID face heightened risk for behavioural and psychiatric disorders, especially during young adulthood (Blacher 2001; Nezu *et al.* 1992). Thus, mothers of young adults with ID are often faced with the added challenges of caring for individuals with behaviour challenges or mental illness, factors which predict increased parenting stress (e.g. McIntyre *et al.* 2002). Likewise, mothers report more stress when raising a son or daughter with lower adaptive functioning (Seltzer & Krauss 1989). Thus, we expect that behaviour problems and adaptive functioning will moderate the influence of mothers' role occupancy on well-being.

Cultural factors in mothers' well-being

Finally, there may be ethnic group differences in the relationship between role occupancy and well-being among these mothers. Latinos and other ethnic minority group members generally experience poorer well-being than majority group members (e.g. Wingard, 1997). Further, Latina mothers may be less connected to health care and disability service systems than Anglo mothers, and less likely to obtain care for their own health needs (Myer *et al.* 2002) or seek treatments or respite for their young adults. Thus, we expect that Latina mothers will experience poorer well-being than Anglo mothers in our sample.

No study we have found addresses the primary impact of multiple roles among Latina mothers of children with ID. Related studies suggest that multiple roles may affect well-being uniquely for Latina mothers. On average, Latina mothers of young adults with ID report more depression and lower morale (e.g. Blacher *et al.* 1997) and make different attributions about their child's behaviour problems than non-Latina mothers (Chavira *et al.* 2000). Further, Latina women have lower education than Anglo women on average; thus, they may hold jobs that are less financially rewarding or require menial or physical labor, which may be more detrimental to health. Too, Latina mothers may more often endorse gender-typed values that emphasize their domestic responsibilities rather than out-of-home employment (Vasquez, 1994). Thus, we expect that Latina mothers will benefit less from employment and other roles than Anglo mothers, a discrepancy that may be reflected in the differences in education and income between these groups. This discrepancy may depend on the Latina mothers' degree of acculturation, or integration into mainstream culture, as higher acculturated mothers may benefit from employment and other roles in ways more similar to Anglo mothers.

Research questions

The current study assesses the relation between multiple roles and well-being, and the potential moderating role of two young adult characteristics (adaptive behaviour and behaviour problems) and two cultural characteristics of mothers (ethnicity and, within the Latino group, acculturation). We aim to address the following questions among Latina and Anglo mothers of young adults with ID:

1. What is the relationship of role occupancy to maternal well-being?
2. Do mothers' roles contribute to their well-being when socio-economic status is accounted for?
3. Do young adult characteristics have a main or moderator relationship with maternal well-being, controlling for SES?
4. Is the relationship between roles and well-being different across cultural groups (Anglo, Latino)?

5. Among Latina mothers, does acculturation moderate the relationship between roles and well-being?

Methods

Participants

Participants were 226 mothers of adolescents or young adults with intellectual disability in the moderate to severe/profound ranges; we will refer to these offspring as young adults. Participating mothers identified themselves as Anglo (n=109) or Latino (n=117). Among Latina mothers, 71% were born in Mexico, 14% in Central or South America, and 15% in the United States; country of origin did not relate to our well-being variables.

Table 1 displays demographics by employment, marital status, and ethnicity. Mothers ranged in age from 35 to 70 years (M=49.0; SD=7.1). Most mothers worked outside the home (62%) and were married (68%). All young adults lived in the family home; their ages ranged from 16 to 26 years (M=20.1; SD=2.6); 57% were male, and 77% were ambulatory. In addition to the primary diagnosis of ID, 30% of young adults were diagnosed with cerebral palsy, 24% with Down syndrome, and 7% with autism. Sixty-one percent of young adults still attended secondary school.

Between-group analyses shown in Table 1 indicated significant SES differences. Income was higher in employed (vs. unemployed), married (vs. unmarried), and Anglo (vs. Latina) mothers. Maternal education, measured as the highest grade completed, was higher in employed and Anglo mothers.

Procedures

Participants were recruited through regional centers in southern California, United States. These agencies provide case management services to individuals with developmental disabilities. All procedures were approved by the Institutional Review Board of the University of California, Riverside. For the present study, only mothers who identified as Non-Hispanic Caucasian (referred to as Anglo) or Latina were included. Regional center staff mailed invitation letters to families who had sons or daughters between 16-26 years old with reported levels of moderate to severe ID. When parents returned the enclosed card, project staff arranged home interviews with mothers. Referral agencies did not keep records of the number of invitations mailed out, so the percentage returned cannot be reported. All data were obtained by two staff in each family's home and preferred language (English or Spanish). All interviewers for the Latino group were bilingual and Latino; all interviewers received extensive training in data collection and interviewing procedures. Each family received $45 for participation.

Instruments

Measures assessed family demographics, young adult adaptive behaviour and behaviour problems, and mothers' acculturation, depression, and physical health. All materials were either available in Spanish or translated, backtranslated, and piloted by staff prior to use.

Vineland Adaptive Behavior Scales (VABS; Sparrow & Cicchetti 1989). The VABS, assessing young adults' adaptive behaviour, were administered to mothers as a structured interview. The *communication*, *daily living skills* and *socialization* subscales were combined to form the adaptive behaviour composite standard score (M=100; SD=16), with α Cronbach coefficient of 0.92, and a VABS composite age equivalency score. Table 2 shows VABS scores by employment, marital status, and ethnicity. Our mean adaptive behaviour

composite score (25.3) was very low, approximately five standard deviations below the normative mean.

Scales of Independent Behavior-Revised Problem Behavior Scale (*SIB-R*; Bruininks *et al.* 1996). The 8-item SIB-R yields a composite score, the General Maladaptive Index (GMI), composed of the Internalized, Externalized, and Asocial maladaptive behaviour indices. The GMI, used here, has a mean of 0 and a standard deviation of 10 in handicapped samples, with a possible range of +10 to −74. Lower scores indicate more maladaptive behaviours. The manual (Bruininks *et al.* 1996) provides sufficient evidence for reliability (test-retest reliability r=.86; Cronbach alpha=.80) and construct, content, and predictive validity.

Acculturation Scale (Marin *et al.* 1987). The Acculturation Scale, administered to the Latino group only, is a 12-item self-report measure of the extent to which individuals have adopted the beliefs and practices of the English-speaking majority culture. Items are grouped into three subscales. *Language Use* and *Media* items have a five-point language scale, ranging from “Only Spanish” to “Only English.” *Ethnic Social Relations* items have a five-point scale, ranging from “All Latinos/Hispanics” to “All Americans.” These scales are summed to produce a total acculturation scale (Cronbach α=0.91 in the current study). The scale is strongly correlated with relevant variables including ethnic self-identification, length of residence in the US, and age of arrival (Marin *et al.* 1987). There is no cut-off score for this measure; thus, we created a two-level acculturation variable divided at the median score of 24 for our sample. Table 2 shows means for Latino mothers.

Demographics and Physical Health. The *Family Data Sheet* (FDS) provided the demographic information in Table 1, including marital and employment status. Included in the group of married mothers were only those who were legally married; mothers who were living with a partner (n=2) were included in the unmarried group. Mothers rated their physical health as 1 (poor), 2 (fair), 3 (good), and 4 (excellent), as shown in Table 2. This single-item measure of global physical health has been used in previous research among caregivers of individuals with ID (Blacher *et al.* 1997;Seltzer & Krauss 1989). The criterion-related validity of this item with a physical examination was reported to be 0.70 (Multidimensional Functional Assessment 1978), and other studies have shown it to be strongly predictive of mortality and morbidity (Idler & Benyamini 1997).

Center for Epidemiological Studies – Depression (CES-D; Radloff, 1977*).* The CES-D is a 20-item Likert-type questionnaire measuring depressive symptoms in the general adult population. Cronbach α for the present sample was 0.84. The CES-D has been used frequently in cross-cultural research (e.g. Blacher *et al.* 1997; Magaña *et al.* 2002). Means are shown in Table 2.

Results

Preliminary analyses

The two well-being variables, mothers’ depression and physical health, were significantly related, r (226)=−.35, p<.001. In this paper, we were less concerned with the specific aspects of well-being predicted by role occupancy and more concerned with distinguishing how specific roles and young adult factors contributed to general well-being. Thus, to simplify analyses, depression and health were combined into a composite “well-being” variable. Depression was reverse coded, and depression and health were converted to z scores and summed; higher composite z scores indicated greater well-being.

The two role variables, employment and marital status, were unrelated, χ^2=.05, ns. For some analyses, we combined these variables into a three-level role variable, in order to quantify

the cumulative number of roles held by each mother. Mothers who were unemployed and unmarried had one role, that of parent (11.9% of mothers), mothers who were either employed or married had two roles (46.5%), and mothers who were both married and employed had three roles (41.6%). Adaptive behaviour on the VABS was very low and skewed; thus, we divided the VABS age equivalency variable at the median and created a two-level variable (lower than 28 months; 28 months or greater).

Relationship of employment, marital status, and ethnicity to maternal well-being

We first assessed the relationship of marriage, employment, and ethnicity to well-being. Independent *t*-tests indicated that well-being was higher for mothers who were married (M=0.08) vs. unmarried (M=−0.42), t (224)=2.14, p=0.03, employed (M=0.09) vs. unemployed (M=−0.37), t(224)=2.03, p=0.04, and Anglo (M=0.46) vs. Latina (M=−0.59), t(224)=5.03, p<0.001. In an one-way ANOVA, well-being differed significantly by the three-level Role score [F (2,223)=6.43, p=.002]. Post-hoc Tukey *t*-tests indicated significant differences between one role (mothers unemployed and unmarried) and two roles (.006) or three roles (.001). However, well-being for mothers with two or three roles did not differ significantly. The relationships between employment, marital status, and well-being are illustrated in Figure 1.

A hierarchical linear regression was conducted to examine the relationship of the role variable to well-being with socio-economic status (SES) variables controlled. Step 1, mother's education and family income, accounted for 19.7% of the variance in well-being, F (2,223)=27.31, p<.001. In Step 2, role (the three-level role variable), did not account for additional variance. Thus, the relationship of mothers' roles to well-being was entirely accounted for by SES differences. In the final model, both SES components entered significantly (standardized beta for income =.265, p=.002; standardized beta for education =. 216, p=.005). Moreover, when role occupancy was entered in Step 2 of a linear regression as three dichotomous dummy variables (e.g. employed vs. unemployed, married vs. unmarried, and occupying all 3 roles vs. occupying 1 or 2 roles), in place of the three-level role variable, no additional variance was accounted for by these dummy variables.

Separate regressions indicated that the three prerequisites for mediation were met for both SES variables; each was significantly related to role and well-being, and role and well-being were independently related. Further, when income was entered in Step 2 of a regression following the role variable, the relationship of role to well-being dropped from significant to non-significant. In a parallel regression with education, the effect of role on well-being dropped but remained significant. Sobel tests of mediation were significant for both income (Sobel z=4.76, p<.001) and education (Sobel z=2.62, p=.009). Thus, family income was a full mediator and maternal education was a partial mediator of the relation between role occupancy and well-being.

Relationships of role occupancy and young adult characteristics to maternal well-being

Next, young adult behaviour problems (SIB-R GMI score) and adaptive behaviour (VABS two-level variable) were added. With SES in Step 1 and role in Step 2, behaviour problems and adaptive behaviour were in Step 3, accounting for 3.8% of variance in well-being, F-change (2,220)=5.49, p=.005. In the final model, behaviour problems but not adaptive behaviour contributed significantly. We next examined whether the relationship between role and well-being was moderated by a young adult characteristic. We first examined the moderation effect of adaptive behaviour. The variables were converted to z scores, and the interaction term was the product of the role variable z score and the VABS two-level variable z score. We ran a regression with SES variables in Step 1, role in Step 2, adaptive behaviour in Step 3, and the adaptive behaviour X role interaction term in Step 4. The

interaction was marginally significant (standardized beta=.106, p=.081), indicating that role was unrelated to well-being when adaptive behaviour was very low, but was positively related when adaptive behaviour was higher. A parallel regression with behaviour problems revealed no moderation effect.

Role analysis by cultural groups

Prior analyses were conducted with the combined sample; next we re-ran the above regressions separately for the Anglo and Latino samples. After accounting for SES in Step 1, role did not enter significantly in either sample. Likewise, in both samples, behaviour problems, but not adaptive behaviour, had a main effect on well-being, and the role X behaviour problems interaction effect was not significant. Several sample differences emerged. In the Anglo sample but not the Latino sample, the adaptive behaviour X role interaction was marginally significant. In the Latino sample, income entered in each final model at $p<.01$, while education was not a significant predictor. In the Anglo sample, education entered in each final model at $p\leq.02$, while income was not significant.

Function of acculturation in the Latino sample

We further examined the cultural context of mothers' roles by measuring the main and moderating effect of acculturation in the Latino group on well-being. We conducted a regression, with predictors converted to z scores and well-being as the dependent variable. Socioeconomic variables were entered as Step 1, role as Step 2, the two-level acculturation variable as Step 3, and the acculturation X role interaction as Step 4. In the final model, acculturation did not contribute significantly, but the acculturation by role interaction was significant (standardized beta=.200, p=.041). The interaction indicated that number of roles was related in a linear fashion to well-being for highly acculturated mothers but unrelated to well-being for mothers with low acculturation, as shown in Figure 2.

Discussion

Our first question asked whether mothers' well-being differed as a function of employment and marital status. Mothers who were unemployed and unmarried had markedly poorer well-being than mothers who were married, employed, or both. These findings are consistent with previous research among mothers of school-age children and adults with ID (e.g. Gottlieb 1997; Hong & Seltzer 1995; Olsson & Hwang 2001). However, our results do not conform to a role enhancement effect, as there is little added benefit from occupying three rather than two roles. Rather, our results are better understood as a *role shortage effect*; mothers experienced particular well-being risk when they had a shortage of roles. This pattern, which was mediated by SES, may reflect an elevated well-being risk for poorer, less educated mothers. Meanwhile, mothers in our sample showed comparable well-being regardless of whether they held two versus three roles. Perhaps the childrearing stresses facing mothers of young adults with ID exert a threshold effect, making it difficult for them to achieve truly high levels of well-being. Further, unexamined factors such as marital strain or less stable, lower-paying employment may prevent these mothers from fully benefiting from multiple roles (e.g. Parish *et al.* 2004).

Our second question asked whether the role relationship to well-being was accounted for by socio-economic status (SES) variables. Our SES variables (maternal education and family income) mediated the impact of role occupancy on maternal well being. Thus, in our sample, the socio-economic benefits of employment and marriage overshadowed any other benefits of role occupancy.

Other investigators have chosen various paths for addressing the role of SES in the relation between role occupancy and well-being; some have chosen to covary income, education or both (Hong & Seltzer 1995; Baruch & Barnett 1986), while others have chosen not to covary SES or to present analyses both with and without SES covariates (Lahelma *et al.* 2002; Waldron & Jacobs 1989). The present findings suggest that what are viewed as role variables and interpreted within that framework may be more appropriately seen as resource variables (i.e., increased income), and understood within a stress model that considers the mediating and moderating role of resources (Blacher, 2001; McCubbin & Patterson, 1983).

Third, we assessed the contribution of young adult behaviour problems and adaptive behaviour to maternal well being, after controlling for SES. Consistent with previous studies, higher behaviour problems in offspring predicted poorer maternal well-being. Adaptive behaviour marginally moderated the relationship of role and well-being. Thus, multiple role occupancy enhances well-being for mothers whose offspring were functioning at least at the level of an average 28-month-old in their adaptive behaviour. Perhaps these mothers are better able to find child-care or to benefit from the presence of a spouse or a job in diffusing parenting stress when their young adult has somewhat higher adaptive functioning. Meanwhile, raising a son or daughter with very low adaptive functioning may be stressful and detrimental to well-being regardless of one's marital or employment status.

Our fourth question asked whether relationships among well-being, SES, roles, and young adult characteristics differed by culture. As expected, Anglo mothers had higher well-being than Latina mothers, a relationship which was fully accounted for by large SES differences between groups. Although not measured here, among mothers raising young adults with ID, Latina mothers appear to be less connected to disability service systems and less able to access needed services such as respite care because of financial, linguistic, or cultural barriers (Blacher & Widaman 2004). In fact, recent qualitative research suggests that Latina mothers raising youth with ID feel alienated from their disability service providers; they experience these providers as treating them poorly, having negative attitudes toward their children, and making little effort to provide services (Shapiro *et al.* 2004). These factors may contribute to the difference in well-being between Anglo and Latina mothers in our sample.

Finally, we examined the function of acculturation in the well-being of Latina mothers. Acculturation is notoriously difficult to measure, and, as in the current study, is most often measured "by proxy," by assessing the extent to which the individual speaks the language of the majority culture and socializes with members of the majority culture (Hunt *et al.* 2004). Thus, we have not attempted to determine whether Latina mothers endorse specific values or practices associated with the majority culture, even though these correlate highly with language.

There was a moderating effect of acculturation by role on maternal well being, after controlling for SES. As hypothesized, occupying more roles predicted better well-being for highly acculturated Latina mothers but was unrelated to well-being for Latina mothers with lower acculturation. Thus, the role enhancement hypothesis was supported among highly acculturated Latina mothers. As hypothesized, this finding may reflect differences in the types of employment and the connectedness to service systems between highly acculturated and less acculturated Latina mothers. By definition, less acculturated mothers are less likely to socialize with English-speaking friends and are less comfortable communicating in English. Thus, these mothers likely had lower paying, more physically demanding jobs, and may be less connected with service delivery systems. Too, less acculturated mothers may feel more responsible for child-care and household duties (Vasquez 1994). This sense of self-sacrifice, known as *marianismo*, may clash with more modern roles for women in the United States and may contribute to depressive symptoms (Gil & Vasquez 1996). For these

reasons, less acculturated mothers may be unlikely to seek care for their own health or to access respite or child-care to accommodate their employment (Myers *et al.* 2002). In such cases, employment itself could become burdensome, with negative health consequences. Thus, the role enhancement hypothesis may need to be adjusted to account for Latina mothers' cultural and work-related values and, as suggested by previous research, the rewards and demands of these mothers' jobs.

None of our findings supported the role strain hypothesis, suggesting that employment and marriage do not overburden these mothers, whether Latino or Anglo. However, our results suggest that the role enhancement hypothesis does not adequately characterize the relation between roles and well-being for mothers raising a son or daughter with ID. Rather, these results highlight mothers who lack additional roles as particularly at risk, and underscore the powerful effect of socioeconomic factors on maternal well-being (e.g. Emerson *et al.* 2005).

We draw several implications from these findings. First, experiences of employment and marriage are quite nuanced and complex, suggesting that researchers should examine more comprehensively how job-related factors and marital factors may explain or alter the relation between roles and well-being among mothers of young adults with ID. Second, mirroring the ethnic disparities seen in other groups, there are ethnic group differences in well-being among mothers of young adults with ID, with Latina mothers reporting poorer well-being than Anglo mothers. Third, Latina mothers who are unemployed and unmarried, or who are not acculturated to mainstream, English-speaking society may face particular health risks. This finding suggests that, in any society, ethnic minority women raising individuals with ID may benefit from interventions targeting their own physical and mental health and assistance in successfully balancing their child-rearing responsibilities with other roles and responsibilities.

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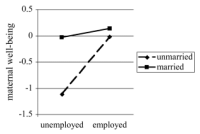

Figure 1.
Relationship between employment, marital status, and well-being.

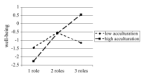

Figure 2.
Among Latina mothers, degree of acculturation moderates the relationship between role occupancy andwell-being.

Table 1

Mothers' and young adults' demographics, by employment, marital status, and ethnic group

	Employed	Unemployed	*t* or χ^2	Married	Unmarried	*t* or χ^2	Anglo	Latino	*t* or χ^2
Mothers									
Age: Mean (SD)	48.4 (6.5)	50.1 (7.9)	t=1.82	49.1 (7.0)	48.9 (7.4)	t=−0.25	48.6 (5.7)	49.5 (8.1)	t=−1.10
Education: (% som e college)	55.0	40.7	χ^2=7.53**	51.6	45.2	χ^2=0.82	72.4	27.4	χ^2=47.86***
Family income (% > $40K)	50.0	31.4	χ^2=7.53**	58.2	15.1	χ^2=34.14***	71.6	16.2	χ^2=70.49***
Marital Status (% married)	67.1	68.6	χ^2=.05	--	--	--	75.2	60.7	χ^2=5.46*
Employment (% employed)	--	--	--	61.4	63.0	χ^2=.05	67.0	57.3	χ^2=2.56
Ethnic group (% Anglo)	52.1	41.9	χ^2=2.27	53.6	37.0	χ^2=5.46*	--	--	--
Young Adult									
Gender (% male)	53.6	61.6	χ^2=1.41	54.9	60.3	χ^2=0.58	56.0	57.3	χ^2=.04
Age: Mean (SD)	20.3 (2.7)	19.9 (2.5)	t = −1.23	20.2(2.6)	20.0(2.6)	t = −0.76	20.4 (2.4)	20.3 (2.8)	t= 0.69
Attends school (%)	57.1	66.3	χ^2=1.86	62.7	56.2	χ^2=0.90	64.2	57.3	χ^2=1.14
Ambulatory (%)	76.4	77.9	χ^2=0.07	79.7	71.2	χ^2=2.09	78.9	75.2	χ^2=0.43
Dx: Unspecified etiology (%)	44.2	35.0	χ^2=1.90	35.3	45.2	χ^2=2.05*	40.4	37.8	χ^2=0.31
Dx: cerebral palsy (%)	30.0	32.6	χ^2=0.16	30.0	24.7	χ^2=2.01	33.9	28.2	χ^2=0.87
Dx: autism (%)	7.0	7.1	χ^2=0.002	8.5	4.1	χ^2=1.45	8.3	6.0	χ^2=0.44
Dx: Down syndrome (%)	27.9	16.3	χ^2=3.98*	22.2	26.0	χ^2=.40	17.4	29.1	χ^2=4.25*

* p<.05.

** p<.01

*** p<.001.

Table 2

Young adult characteristics and maternal well-being measures by employment, marital status, and ethnic group

	Employed	Unemployed	*t*	Married	Unmarried	*t*	Anglo	Latino	*t*
VAB Age									
Equivalency Score Mean (SD)	46.4 (38.9)	31.4 (23.8)	−3.59***	42.8 (35.6)	36.3 (32.5)	−1.31	43.8 (37.1)	37.8 (32.1)	1.28
SIB-R Behavior									
Problems Mean (SD)	−12.2 (10.3)	−14.3 (11.7)	1.39	−12.3 (10.3)	−14.4 (11.9)	1.30	−13.2(10.8)	−12.7 (11.0)	0.34
Acculturation: Mean (SD)[a]	27.0 (9.7)	24.7 (10.7)	−1.09	24.8 (9.7)	26.8 (10.5)	−0.96	--	26.0 (10.2)	--
CES-D depression Mean (SD)	13.0 (10.4)	14.2 (11.3)	0.83	12.4 (10.2)	15.6 (11.6)	2.15*	12.1 (10.5)	14.7 (10.9)	−1.86†
Health Mean (SD)	3.0 (0.8)	2.7 (0.8)	2.51***	2.9 (0.8)	2.8 (0.9)	−1.36	3.2 (0.7)	2.5 (0.9)	6.61***

[a] Includes Latino group only

† $p<.10$.

* $p< .05$.

** $p< .01$.

*** $p<.001$.