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Longitudinal Study of Daily Hassles in Adolescents in Arab Muslim Immigrant Families

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Abstract

This study investigated which daily hassles (i.e., Parent, School, Peer, Neighborhood, and Resource) were perceived by Arab Muslim immigrant adolescents as most stressful over a three-year time period and according to child's gender and mother's immigration status (i.e., refugee or non refugee). Data were collected at three time points during adolescence and analyzed using doubly multivariate analysis of covariance (MANCOVA) with linear and quadratic trends. School and Parent hassles were greater than other hassles at every time point. Main effects of time, immigration status, and father's employment, but not child's gender, were statistically significant. School and Parent hassles increased while Peer and Resource hassles decreased over time. Adolescents with refugee mothers reported greater School and Neighborhood and fewer Parent hassles than those with non refugee mothers. Adolescents with unemployed fathers reported significantly more School and Neighborhood hassles. Study findings identify two at risk subgroups: those adolescents with refugee mothers and/or those adolescents with unemployed fathers; and pinpoint problematic daily hassles. Additional research is needed to explore vicarious trauma effects as a potential underlying reason for the pattern of daily hassles noted in adolescents with refugee mothers.

Keywords

Arab Muslim immigrants; adolescence; daily hassles

INTRODUCTION

Arab Muslim adolescents in immigrant families who are living in Euro-American countries frequently encounter negative media portrayal of their culture and religion, discrimination from peers and society at large, and exposure to conflicting Islamic and Euro-American

norms about acceptable adolescent behavior. (1–3) These conditions collectively provide negative experiences for youth and likely manifest as hassles in their daily lives.

Daily hassles are perceived micro stressors (4) that are associated with mental health problems (5–9), particularly when they are repetitive or sustained over time. (10) Yet, there is limited research that investigates Arab Muslim adolescents' daily hassles and none of this research addresses changes in daily hassle domains over time. Longitudinal studies are needed to document the occurrence of daily hassles over time (11) to identify problematic domains and time interventions accordingly.

This longitudinal study investigated which daily hassle domains (parents, peers, school, neighborhood, and/or resource) were perceived as most stressful by Arab Muslim immigrant adolescents in the U.S. Participants were either first or second generation adolescents (i.e., foreign or U.S. born, respectively) with Muslim mothers who emigrated from an Arab country. The research questions were: (1) How do adolescent perceptions of daily hassles change over a three year time period and (2) what are the effects of adolescent gender and mother's immigration status (i.e., refugee, non refugee) on adolescent perceptions of daily hassles.

The impetus for these research questions came from a larger longitudinal study that found that adolescent daily hassles had a strong direct effect on adolescent behavior problems at two time points. (12, 13) Because the total adolescent hassles score was used, it was unclear which hassle domains were perceived as most stressful and whether these perceptions changed over time. The interest in mother's immigration status (refugee, non refugee) also came from previous findings. In the larger study, refugee mothers reported significantly more PTSD symptoms (14) and adult daily hassles (12) than non refugee mothers, suggesting that mother's immigration status is an important context for families.

Although daily hassles are ubiquitous and experienced by adolescents throughout the world (15), daily hassles likely vary depending on group circumstances and cultural expectations. Previous studies about Arab Muslims lack specific information about group or individual differences even though there is a wide variation in how Islam is embraced and interpreted. (16) The literature described below reflects a traditional interpretation, which was the interpretation embraced by the Arab Muslim immigrant community where the study was conducted. (17)

Parent Hassles

It is commonly known that adolescents experiment with new behaviors, that parents monitor adolescent behavior for acceptability, and also that adolescents frequently complain that parents interfere with their growing independence. (18) However, in contrast to Euro-American cultural habits, Islamic prescriptions to maintain family honor and respect parental authority (19) may result in adolescents choosing to behave according to parents' expectations and readily accepting parental monitoring. For example, Arab Muslim youth may not challenge parents who mandate that they socialize exclusively with peers who adhere to Islamic norms. (19) On the other hand, immigration to a Euro-American country exposes Arab Muslim youth to competing and more lenient norms about adolescent

behavior (2) and this exposure could generate more strife with parents. Arab Muslim girls may report more parent hassles because they are more closely monitored and have less latitude than boys with regard to pre-marital sex, substance use, and mixed gender activities. (19, 20)

Another parent hassle for adolescents in any society is interparental conflict. (21) Although the stress of immigration potentially generates marital discord (22), interparental conflict may be more prevalent in immigrants who are refugees. Refugees have a higher incidence of PTSD than non refugees (23, 24) and many PTSD symptoms, such as disengagement, interpersonal violence, and substance abuse, are associated with marital discord and also known to contribute to adolescent stress. (25)

Peer Hassles

Youth in immigrant families often experience peer rejection because of cultural differences with native-born peers. (26) For Arab Muslim youth, cultural differences between Euro-American and Islamic norms as well as post 9/11 discrimination and negative media portrayal of Muslims (27, 28) are compounding factors. Arab Muslim adolescent girls may experience more peer hassles than their male counterpart for two reasons: First, girls' traditional dress visibly portrays their Muslim identity, making girls stand out as easy targets for peer discrimination. (3) Second, consistent with published studies on gender differences (29), girls are typically more sensitive to interpersonal conflict than boys.

School Hassles

Immigrant youth tend to have more school hassles than youth in the general population because of limited language skills, having parents with limited resources, and changing schools frequently. (30–32) For instance, English is often not the primary language spoken in many immigrant homes (33) and non-native speakers need 4–7 years of quality academic instruction to gain English language proficiency comparable to that of native speakers. (34) Immigrant parents who are refugees may have even greater difficulty assisting with their children's academic endeavors, particularly if they are suffering from impaired concentration from PTSD.

In Euro-American countries, studies have shown that adolescent girls mature more rapidly and tend to perform better in school than boys. (35) However, Arab Muslim boys are expected to assume financial responsibility as heads of households when they grow up, and their parents may have higher performance expectations for them. (19) Thus, Arab Muslim boys may have more performance anxiety and report more school hassles than Arab Muslim girls.

Neighborhood Hassles

Neighborhood risk affects youth through the confluence of low income, crime, and limited neighborhood resources. (36) However, this confluence may not be prevalent in low-income immigrant neighborhoods. Immigrant neighborhoods have a dense population of co-ethnics who provide social control and an atmosphere of mutual trust to offset problems associated with typical inner city low-income neighborhoods. (37)

Resource Hassles

Immigrant parents are often struggling to build material resources in a new country and unable to provide personal resources of concern to adolescents, such as having one's own room and nice clothes. (38) However, Arab Muslim families tend to be large and close (19) and youth in these families may expect to share material goods. Arab Muslim youth with refugee parents may have even fewer materialistic concerns than those with non refugee parents because of survivor guilt. Survivor guilt is common in refugees (39) and materialism is not consistent with survivor guilt.

These considerations lead us to the following hypotheses: We expect gender and immigration effects on parent hassles, with girls and adolescents with refugee mothers reporting more parent hassles than boys or adolescents with non refugee mothers. Peer hassles are expected to be high for both genders, but higher for girls. School hassles are expected to be high for everyone, but higher for boys and adolescents with refugee mothers. Neighborhood and resource hassles are expected to be low, with resource hassles expected to be lowest in adolescents with refugee mothers.

METHODS

Sample

Human subject approval was granted by the university affiliated with the study. Six hundred and thirty five dyads of Arab Muslim immigrant mothers and adolescents were recruited at Time 1. The sample used in the analyses reported here was the 454 dyads who participated in all three points. Of the 635 dyads recruited at Time 1, 181 were lost to follow-up, with most attrition occurring between times 1 and 2. Almost half (45%) of those lost to follow-up was because of refusal for further participation or scheduling difficulty, which was interpreted as an indirect or "polite" form of refusal. Only 7.8% of the attrition was due to not being able to locate the family. Additional attrition was due to ineligibility, such as family moved out of the area or child married or no longer living at home.

Study participants were living in metropolitan Detroit, a Midwestern U.S. area with a large Arab Muslim population. (17) To participate, the mothers had to have emigrated since 1989 and have a child willing to participate between the age of 11 and 15 at Time 1. The year of earliest possible emigration was because earlier waves of Arabs were mostly Christians. (40) Reading and English ability were not criteria for participation because data were collected verbally in participants' language of preference. The majority of mothers (97%) chose Arabic, whereas the majority of youth (91%) chose English.

The sample was recruited by Arabic-speaking research assistants who were also Arab immigrants living and working in the local Arab community. They verbally advertised the study to the mothers and recruited interested participants during informal day-to-day contact with Arab Muslims. This contact occurred while the research assistants were shopping, running errands, or attending community events.

Most families were from Iraq ($n = 196$), followed by Lebanon ($n = 165$). The remaining 93 families were from another Arab country, including Yemen, Jordan, Kuwait, Egypt,

Morocco, Saudi Arabia, Palestine, Syria, or the United Arab Emirates. Almost all of the refugee families were from Iraq (190 of 196) and left Iraq because of persecution (i.e., home invasions, torture, imprisonment) under Saddam Hussein's regime. Most of the participants from the other Arab countries were not refugees.

The adolescent's age at each time point is displayed in Table 1. The shorter time interval for the third time point was because of pending attrition among study personnel and the desire for retaining continuity between study participants and study personnel.

Table 2 displays additional demographic and migration characteristics of the sample by mother's immigration status (refugee, non refugee). Mothers' average age (40+/-6) reflects the fact that only women with a child between the ages of 11 to 15 at Time 1 were eligible for participation. The high number of mothers who were married and/or reported homemaker as their employment status is consistent with traditional Muslim expectations for Arab women. The dyads lost to follow-up were compared to the dyads remaining in the study at Time 2 (i.e., the time when most of the attrition occurred) on each of the socio-demographic variables. No significant differences emerged.

Data Collection

Data were collected between May 2004 and December 2008. Participants were asked to participate at three time points over the course of approximately three years. Consent was obtained from both the mothers and adolescents at Time 1. (Consent from fathers was not sought since fathers did not provide data.) Data were collected by verbally administering measures in study participants' homes with mother and adolescent physically separated. The mother was given \$60 compensation for her and her adolescent for each session.

The measures of interest to this analysis of adolescent daily hassle trajectories are the Adolescent Daily Hassle Scale (ADHS; (4)), a demographic questionnaire, and a measure of environmental risk, (41) which was used as a proxy measure for disposable family income. Mothers completed the demographic questionnaire and measure of environmental risk. Adolescents completed the ADHS.

Arabic language versions of the measures were developed using translation and back-translation by two bilingual research assistants and subsequent discussion by a committee to resolve disagreements and reach consensus about the final translation. Previous research that included comprehensive assessment of the study measures (42) showed that the ADHS did not warrant cultural adaptation.

The ADHS (4) assesses the intensity of daily hassles about parents, peer, school, neighborhood, and resource hassles. The four Parent items pertain to parental monitoring and interparental conflict. The three Peer items pertain to conflict with peers. The four School items address stress related to academic performance. The five Neighborhood items include crime and access to safe playgrounds. The five Resource hassles pertain to material resources of importance to adolescents, such as nice clothes and one's own room. For each hassle reported as occurring in the past month, intensity was rated on a 4-point scale ranging from 1 (not at all a hassle) to 4 (a very big hassle). Intensity ratings were summed for each

subscale to yield a subscale score, with high scores indicating greater hassles. Cronbach's alphas for the scales ranged from .63 for Neighborhood to .74 for Parent hassles.

The demographic questionnaire asks about age and country of origin of the mother and child, mother's immigration status (refugee, non refugee), both parents' education and employment, child's gender and age at immigration, and when the mother emigrated.

The environmental risk measure (41) contains 14 objective items about the family's proximal environment, including home plumbing and heating as well as noise, pollution, abandoned homes, vacant lots, safe playgrounds, and whether any household member has witnessed or been a victim of a crime in the neighborhood. Items are scored dichotomously and summed to yield a total score. A higher score indicates lower disposable income.

Data Analysis

The effects of immigration status and gender on adolescent daily hassle domains and domain trajectories were examined using multivariate analysis of covariance (MANCOVA). Repeated measures made the design "doubly multivariate." Trajectories were examined using polynomial contrasts. Potential confounders were identified empirically in two steps: (1) by computing bivariate correlation between each of the background variables shown in Table 2 and the hassles subscales and (2) examining the association between significant background variables and immigrant status and gender. Variables with a significant association in both steps were included in the multivariate model as covariates and possible confounders, thereby identifying variables that are theoretically causally related to daily hassle domains and also associated as potential confounders with parent's immigration status and/or child's gender. The only two background variables in Table 2 that met both criteria for potential confounders were father's occupational status and mother's educational level.

FINDINGS

The main effects of immigration status (refugee, non refugee), time, and father's employment were significant, $\Lambda = .94, p < .01$, $\Lambda = .92, p < .01$, and $\Lambda = .97, p < .05$, respectively. There were not significant multivariate effects involving gender. Univariate analysis for variance results were examined to determine which specific hassles scales accounted for significant multivariate differences. Immigration status was significantly related to School hassles [$F(1, 449) = 7.39, p < .01; d = .29$], Parent hassles [$F(1, 449) = 4.81, p = .03; d = .24$], and Neighborhood hassles [$F(1, 449) = 7.35, p < .01; d = .12$]. As shown in Figure 1, adolescents with refugee mothers reported more School and Neighborhood hassles and fewer Parent hassles. Cohen's d statistics, the standardized differences in means, were significant for School, Parent, and Neighborhood hassles but in the small range for School and Parent hassles and very small for Neighborhood hassles. (43)

The univariate analyses of the main effects of time were performed on linear and quadratic trends for each of the five subscales. Except for Neighborhood hassles, each of the univariate linear trends was significant ($p < .05$; see Figure 2). Examination of the trajectories (Figure 2) shows that adolescent hassles with schools and parents increased over

the three year study interval, while adolescent hassles with peers and resources decreased. Adolescent hassles with school were twice as high or higher than other hassles at all three time points. Parent hassles were the second most highly reported hassles.

Follow-up analysis of the multivariate effect of father's employment showed significantly more School and Neighborhood hassles among adolescents of unemployed fathers [$F(1, 449) = 3.95, p = .047$; $F(1, 449) = 8.17, p = .004$, respectively].

Although multivariate interactions involving time were not significant, one univariate quadratic interaction involving mother's education was significant ($p < .05$; see Figure 3). Teens with mothers having a HS+ education, showed an increase in School hassles earlier in their adolescent years than teens of less educated mothers.

DISCUSSION

In summary, School and Parent hassles, respectively, were the first and second most frequently reported hassle domains. Over the three year study period, hassles in both of these domains increased, whereas Peer and Resource hassles decreased and Neighborhood hassles remained the same. Arab Muslim adolescents with refugee mothers reported more School and Neighborhood hassles and less Parent hassles than those with non refugee mothers. Regardless of whether mothers were refugees, father's unemployment was significantly related to greater reports of School and Neighborhood hassles. At Time 2, when the teens were on average 15.33 years old, those with more highly educated mothers reported more School hassles than those with less educated mothers.

None of the hypotheses about gender differences and only one of the hypotheses about the effect of immigration status was supported -- specifically that School hassles would be higher for adolescents with refugee mothers. Contrary to expectations, reports of Parent hassles were lower in adolescents with refugee mothers. Also contrary to expectations, reports of Peer hassles were low. Low reports of Neighborhood and Resource hassles were expected but the higher report of Neighborhood hassles by adolescents with refugee mothers was not. However, this latter effect was very small.

The configuration of daily hassle domains found in Arab Muslim immigrant adolescents in this study is similar to adolescents in general. According to other studies, adolescents report parent and school hassles more frequently than hassles in other domains, (15) school stress increases over time as adolescents transition into more demanding academic settings, (44) and resource hassles decrease after early adolescence as self-esteem becomes less linked to material possessions. (45)

Our finding of Parent hassles decreasing over time is different from findings from another longitudinal study of adolescent stress that found that Parent hassles decrease in late adolescence. (11) However, the reported decrease in this other study was when the adolescents were about 19 years old. We may have observed a similar decrease in Parent hassles in our study if we had studied late adolescence.

Some unexpected findings warrant further discussion. Peer hassles were anticipated to be high based on literature about peers rejecting immigrant youth. Our finding of low reports of Peer hassles may be because participants lived in metropolitan Detroit, which has one of the largest Arab populations outside the Middle East. (46) This ethnically dense neighborhood could have led to almost exclusive friendships with co-ethnics, which conceivably minimized peer rejection stemming from cultural differences. In other words, it is unlikely that non Arab peers had much sway in this geographic area.

The finding that adolescents with refugee mothers reported fewer Parent hassles is curious. Perhaps these adolescents are protecting their parents, avoiding disagreement so as to not exacerbate parents' pre-migration trauma. This explanation is consistent with findings from a study of children of Vietnamese refugees. (47). In the Vietnamese study, youth reported indebtedness to their parents for leaving their homeland and providing a better life in the new country. Also curious is the finding that Arab adolescents with refugee mothers reported more Neighborhood hassles, particularly since refugee and non refugee mothers gave comparable reports of neighborhood conditions. Perhaps adolescents with refugee mothers are more sensitive to neighborhood conditions, possibly due to family transmission of PTSD symptoms such as hyper arousal. Hyper arousal as a possible explanation is consistent with other study findings, whereby having a parent with PTSD predisposes youth to PTSD symptomatology (48), particularly when the parent is the mother. (49) However, hyper arousal as an explanation is tentative; it is possible that the measure of objective environmental conditions missed subtle differences in refugee and non refugee neighborhoods.

The finding that adolescents with more highly educated mothers reported more School hassles at a younger age than other adolescents is not consistent with the position that more highly educated parents have more resources to support children's academic efforts. (35) This position is culled from studies reporting the impact of parents' education on academic achievement. Stress from *striving* for academic achievement may be different. A new finding that emerged from this study is that perhaps more highly educated mothers expect exemplary academic performance, thereby unwittingly fueling school stress in their children.

Study limitations include a nonprobability sample from one geographical area that was somewhat unique in its dense concentration of Arab Muslim immigrant families. Second, parents in the study, on average, had low education, perhaps because the financial incentive prompted families with less earning power to participate. Third, adolescents were recruited through the mothers, many of whom had more than one child who was eligible to participate. Mothers may have selected children with more or less stressors in the hopes of obtaining help or engaging a more cooperative child for study participation. Thus, caution is indicated when generalizing the findings to other Arab Muslim adolescents in immigrant families. Also of note is that in this study, immigration status and country of origin are confounded (i.e., almost all of the mothers from Iraq were refugees). Thus, it is possible that some of the findings we attributed to immigration status, such as fewer parent hassles, could be because of Iraqi heritage. However, as mentioned above, our findings are consistent with other studies about children of refugees (47).

The results from this study provide direction for further exploratory qualitative research to determine the reasons behind Arab Muslim adolescent stress perceptions. Of particular interest are why adolescents with refugee mothers reported less Parent hassles and more Neighborhood hassles than those with non refugee mothers and whether these findings reflect family transmission of pre-migration trauma. Determining the prevalence of PTSD in youth who have not been exposed directly to trauma is also indicated. Mother's influence on School hassles, particularly how her expectations shape adolescent stress about academic performance, also warrants further research. Although parents "hassling" youth about school performance may equip youth with requisite academic skills, salutary effects may depend on whether this type of parental monitoring fits the child's ability.

Study findings provide specificity for identifying which daily hassle domains are problematic for particular subgroups of Arab Muslim immigrant adolescents. People working with Arab Muslim immigrant families should consider that adolescents with refugee mothers and/or unemployed fathers are potentially at risk for School hassles and stress associated with academic performance. Arab Muslim mothers who are more highly educated may need to exercise caution when communicating expectations for academic achievement to their youth, particularly if expectations exceed the child's capability or available resources. Adolescents identified in this study as at risk for greater school hassles would benefit from interventions that assist them with setting realistic expectations and obtaining the skills and resources to achieve their expectations.

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Figure 1.

Adolescent hassles subscale scores by immigrant status. Means in order of scales as displayed were: 1.45, .59, .31, .22, and .53 for refugees; and 1.22, .70, .20, .23, and .52 for non refugees.

Figure 2.

Adolescent Hassles subscales by time of testing. Time 2 was 18.56 months post T1. Time 3 was 15.49 months post T2. Linear trends were significant for School, Parents, Peers, and Resources, F 's(1, 449) = 6.01, 3.91, 8.88, and 8.65, p 's = .015, .049, .003, .003, respectively.

Figure 3.

Adolescent Hassles subscales by time of testing and mothers education (less than high school vs. high school graduation or more). The quadratic effect of School hassles was significant, $F(1, 449) = 4.70, p = .031$. No other Time x Education interactions were statistically significant although the quadratic trend in Parent hassles approached significance, $F(1, 449) = 3.43, p = .065$.

Table 1

Child's Age and Retest Interval (N = 454) by Time of Testing

Variable	SD pooled	Time of Testing		
		T1	T2	T3
Child's Age (years)	1.18	13.78	15.33	16.62
Retest Interval (months)	2.24		18.56	15.49

Table 2

Demographic Characteristics of Sample by Immigration Status (N = 454)

	Immigration Status		
	NonRefugee (n = 255)	Refugee (n = 199)	Total
	M (SD)		
Mother's age	40.78 (6.45)	40.39(6.57)	40.61(6.50)
^a Child age at immigration	6.18 (5.03)	4.97 (3.16)	5.65 (4.35)
^b Mother's yrs. In U.S. *	7.65 (5.05)	8.80 (2.76)	8.16 (4.23)
Environmental risk	.08 (.10)	.09 (.11)	.09 (.11)
	Percent		
Child gender (% girls)	46.3	54.3	49.8
Married mothers	85.5	87.9	86.6
Fathers employed full or part time *	71.4	40.7	57.9
Mothers less than high school *	61.2	69.3	64.8
Fathers less high school	54.5	54.3	54.4

*
p < .05^a n = 381; excludes the 73 children who were born in the U.S.^b middle interquartile range (50%) is 4.5 to 11 years in the U.S.