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Ethnicity Moderates the Association Between Attachment and Wellbeing in Later Life

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Abstract

Attachment styles are associated with wellbeing across the lifespan. Particularly in later life, when individuals face declining health and increasing dependency, patterns of attachment may predict affective outcome. Previous work has been concentrated among younger cohorts and majority samples and not examined the attachment-wellbeing link at the end of the lifespan nor among ethnically diverse samples. Data from a sample of older adults (N = 1,118) were used to investigate how secure, dismissive, and fearful/avoidant styles were linked to wellbeing in four ethnic groups; African Americans, European Americans, Eastern European immigrants, and English speaking Caribbean immigrants. As expected, both secure and dismissive attachment dimensions predicted greater wellbeing while fearful/avoidant attachment predicted less. In addition, however, the security-wellbeing link was stronger among African Americans and English speaking Caribbeans and the detrimental impact of fearful/avoidant attachment on wellbeing reduced among English speaking Caribbeans. Results are interpreted in light of general and culture specific premises of attachment and may aid in understanding challenges of ethnic diversity and immigration to adaptive outcome at old age.

The associations between patterns of attachment and adaptive outcome early in life are well-established (e.g., Thompson, 2008). Attachment security predicts greater positiveness of self among children (Verschueren, Marcoen, & Schoefs, 1996) and more effective stress and emotion regulation in adolescents (Willemen, Schuengel, & Koot, 2009). Less research has examined such links among older samples (Magai, 2008) or paid attention to the possibility that links between dimensions of attachment and affective outcomes may vary across ethnic groups (see Consedine & Fiori, 2009; Magai et al., 2001 for exceptions).

There are, however, good reasons to suspect that the links between attachment and wellbeing may vary ethnically although the absence of prior work means the direction of any moderation is somewhat unclear. On the one hand, widespread expectations of love, bonding, solidarity and family affiliation across groups (Schulze, Tyrell, & Künzler, 1989), may imply a comparative lack of variation in the links between attachment and outcomes across cultures. On the other hand, patterns of attachment are differentially distributed across groups (Fiori, Consedine, & Magai, 2009; Kafetsios & Sideridis, 2006; Magai et al., 2001), vary across age cohorts (Fiori et al., 2009; Magai et al., 2001), and may have different meanings in different cultural contexts. The current work presents data from a large study of later life adults and tests whether or not dimensions of adult attachment predict wellbeing equally across four distinct ethnic groups.

Adult Attachment – the Lifespan View

Despite its origins as a lifespan concept (Bowlby, 1979), attachment has primarily been studied in the context of mother-child (e.g., Ahnert, Gunnar, Lamb, & Barthel, 2004; Kochanska & Coy, 2002) and young adult romantic relationships (Hazan & Shaver, 1987); older adults remain an infrequent focus (Bradley & Cafferty, 2001; Magai & Consedine, 2004). However, the intra- and interpersonal challenges of later life – greater dependency, interpersonal losses, activity limitation and increasing mortality salience (Consedine, Magai, & Krivoshekova, 2005) – imply that dominant styles of relating may be important. Attachment theory (Ainsworth, 1973; Bowlby, 1969/1982) suggests that early, emotionally charged, relationships with primary caregivers are incorporated into mental models that direct individuals' interpersonal perceptions and evaluations throughout life (Collins, 1996; J. A. Feeney, 1999; Merz & Consedine, 2009) and are used to guide behaviour and interpret stressors within relational interactions (Consedine & Fiori, 2009). Research typically differentiates three (Hazan & Shaver, 1987) or four (Bartholomew & Horowitz, 1991) styles of relating to significant others. The distinction is among secure attachment, and two or three insecure styles, that is dismissive, preoccupied, and fearful avoidant attachment although recent research emphasizes dimensional rather than categorical approaches (e.g. Consedine & Fiori, 2009; Merz & Consedine, 2009; Mikulincer et al., 2001).

In considering attachment dynamics among older groups, it is important to recall that attachment dimensions are unequally distributed at different stages of life. While younger samples are predominantly securely attached (e.g., Davila, Burge, & Hammen, 1997; Feeney & Noller, 1990; Hazan & Shaver, 1987; Roisman, Fraley & Belsky, 2007a; Van IJzendoorn & Bakermans-Kranenburg, 1996), older groups typically report more dismissing attachment (Fiori, et al., 2009). In one study, for example, while 18% of the young and 22% of the middle-aged adults were dismissing, the figure for the oldest group was 40% (Diehl, Elnick, Bourbeau, & Labouvie-Vief, 1998). Other work is consistent with these findings, reporting either 52% dismissiveness among older adults (Webster, 1997), or 78% avoidant where ethnically diverse samples are concerned (Magai et al., 2001).

In this context, it is also worth recalling that older adults are normatively confronted with deteriorating health and functional impairments which, in addition to impacting wellbeing directly, may require adjustments to feelings of dependency and threatened autonomy (Baltes, 1996; Fiori, Consedine, & Magai, 2008; Lee & Ellithorpe, 1982; Silverstein, Chen, & Heller, 1996; Steele, Phibbs, & Woods, 2004). Prioritization of independence in later life may be reflected in greater dismissive attachment scores and, potentially, mean a different association between dismissiveness and wellbeing. More fully, because the prioritization of independence is not necessarily indicative of a devaluation of relationships, we might expect the relation between this dimension of attachment and wellbeing to differ from that seen in younger groups such that independence motivations and dismissive attachment predict enhanced wellbeing.

Attachment and Affective Outcomes in Later Life

Given the centrality of attachment to social functioning and the fact that most emotional experiences are socially embedded (Consedine & Magai, 2003), it is unsurprising that attachment predicts affective outcomes. While security is characterized by a positive view of the self and others, a desire for intimacy and closeness (Kachadourian, Fincham, & Davila, 2004), and the ability to balance autonomy and interdependence (Merz & Consedine, 2009; Merz, Consedine, Schulze, & Schuengel, 2009), dismissiveness is linked to a positive self/negative other view, emotional stoicism, difficulties with trust and reliance on others (Consedine & Magai, 2003; Magai, Consedine, Adjei, Hershman, & Neugut, 2008), and lower social support (Collins & B. C. Feeney, 2000; Kobak & Sceery, 1988). Preoccupation is associated with a negative view of the self, pessimistic views of relationships (Mikulincer, Shaver, & Pereg, 2003), and hyper vigilance to rejection (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993; Mikulincer, 1998a) while fearful or fearful avoidant styles are associated with a sense of negative sense of self, and view of others as untrustworthy, unreliable and rejecting.

In terms of specific emotional outcomes, studies in younger samples suggest that security predicts positive affect (Mikulincer & Florian, 1998), cheerfulness (Kobak & Sceery, 1988), joyfulness and interest (Magai, Distel, & Liker, 1995), and less depression (Hazan & Shaver, 1987), anger (Mikulincer, 1998b), or anxiety (Mikulincer & Orbach, 1995). Dismissing attachment predicts greater hostility and defensiveness (Kobak & Sceery, 1988; Mikulincer, 1998b; Mikulincer, Florian, & Weller, 1993), greater disgust and contempt (Magai et al., 1995), but reduced conscious anxiety (Bartholomew & Horowitz, 1991) while preoccupied attachment predicts greater peer-rated anxiety (Kobak & Sceery, 1988), shame and lower self-confidence (Bartholomew & Horowitz, 1991; Magai et al., 1995), and higher levels of sadness and self-reported anxiety (Magai, et al., 1995).

A few prior works among older adults suggest that attachment may predict positive affect (e.g., Consedine & Magai, 2003; Merz & Consedine, 2009) and wellbeing (e.g. Kafetsios & Sideridis, 2006; Merz et al., 2009a). One recent study, for example, found that seven of eight wellbeing dimensions were predicted by attachment, with secure and dismissive categorizations (Bodner & Cohen-Fridel, 2010). Another report found that security predicted greater joy and interest whereas dismissiveness was associated with lower shame and fear and with greater interest (Consedine & Fiori, 2009). However, because older adults appear better able to integrate and sustain complex emotional experiences (Magai, Consedine, Krivoshekova, Kudadjie-Gyamfi, & MacPherson, 2006) it may be that the relations between attachment and affective outcomes vary. In one study, while anxious attachment was negatively associated with wellbeing, this link was stronger for younger than for older adults (Kafetsios & Sideridis, 2006).

Consistent with the literature described above, we expected a positive association between scores on secure attachment and wellbeing. Given the fact that our respondents are well into old age, a period of life associated with functional impairments and dependency, we expected that the emphasis of self-reliance and independence, reflected by high scores on dismissive attachment would also be positively associated with wellbeing (Bodner & Cohen-Fridel, 2010). Finally, consistent with work describing a negative view of the self, rejection sensitivity, and pessimistic expectations regarding interpersonal transactions (Kobak et al., 1993; Mikulincer, 1998a; Mikulincer et al., 2003) and increased negative emotionality (Bartholomew & Horowitz, 1991; Kobak & Sceery, 1988; Magai et al., 1995), we expected greater ambivalent/fearful attachment to predict lower wellbeing.

Ethnicity as a Moderator of the Attachment-Wellbeing Link

Although most work linking attachment and affective outcomes in later life remains rooted in majority samples, attachment styles are differently distributed across ethnic groups. One early study reported higher security in European Americans compared to African Americans (Magai et al., 2001) and greater dismissiveness among African Americans. A second study of 616 older men and women from seven ethnic groups in the United States found high dismissiveness among Haitians and Eastern European immigrants (Fiori et al., 2009), while another reported higher security and dismissiveness in Eastern European immigrants compared to US-born European and African Americans (Merz & Consedine, 2009). The current report evaluates the links between attachment and wellbeing in two native (European American, African American) and two immigrant (Eastern European, African Caribbean) ethnic groups.

Although important, ethnic group-level differences in the mean scores on attachment dimensions do not, in and of themselves, provide grounds upon which to expect differences in the *relations* between attachment and wellbeing. However, it is worth recalling that how attachment patterns develop, operate, and are manifest is very specific for cultural and ethnic contexts. Different distributions may be influenced by various factors, such as family structure and norms (e.g., familism) and socialization practices, but also by (adverse) life events, cultural and historical circumstances and immigration history. Of particular note are systematic ethnic differences in three key areas of psychosocial functioning – child socialization, immigration histories, and social network characteristics.

A large literature suggests that when compared to Whites, African Americans have smaller networks with a greater proportion of family with whom they have more contact (e.g., Ajrouch, Antonucci, & Janevic, 2001). Perhaps as an adaption to adversity (Montague, Magai, Consedine, & Gillespie, 2003), family structure in both African American and Caribbean cultures departs from the traditional nuclear composition and have been characterized as extended, often involving multiple caregivers to children (Garcia Coll, 1990; Howes, 1999;) with support drawn from family, friends, and the church (Levin, Taylor, & Chatters, 1994). Similarly, Eastern Europeans may report mistrust and value self-reliance following experiences under Communism, the social, economic, and political chaos following the collapse of communist regimes, and the circumstances associated with immigration histories (Fiori et al., 2009). Indeed, immigration processes may promote changes in independence and self-reliance motivations for the simple reason that traditional networks are less able to provide support. Older immigrants to Western countries may value collectivism and family solidarity more highly than their Western-socialized children (Merz, Özeke-Kocabas, Oort, & Schuengel, 2009b). First generation immigrants may want to rely on significant others because of restricted networks in the host country and the increased security needs resulting from stressful circumstances, such as language difficulties, social isolation, financial and existential concerns. Hence, in addition to impacting wellbeing directly through the creation of stress (Lowenstein & Katz, 2005), immigration and cultural histories may affect wellbeing indirectly by causing the links between attachment dimensions and wellbeing to vary.

A related stream of work suggests that issues of racism, prejudice and encouragement of expressive control through physical means may be more characteristic of African American (Bakermans-Kranenburg, Van IJzendoorn, & Kroonenberg, 2004; Fiori et al., 2009) and Caribbean (Consedine, Magai, & Horton, 2005) socialization practices. Parental discipline behaviours, which have long been considered integral to socialization (Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000), tend to be harsh within African American families (e.g., Deater-Deckard, Dodge, Bates & Pettit, 1996; Pinderhughes et al., 2000), with their parental style being characterized as a "no-nonsense" style (Brody & Flor, 1998).

Socialization environments of this type have been hypothesized to underlie the development of dismissive attachment and/or the differential valuation of independence among African-descent groups (Fiori et al., 2009). Importantly, however, the *meaning* associated with such differences in distinct ethnic groups may lead to situations where ethnic context moderates the links between variables. While African American and Caribbean parents tend to rely on harsh discipline (promoting greater dismissiveness as well as emotional control and independence valuation), this practice may be both normative and adaptive within their cultural contexts (Brody & Flor, 1988; Kelley, Power, & Wimbush, 1992). Consistent with this view, empirical work demonstrates that physical punishment does not have the same impact on externalizing behaviours among African American children (Deater-Deckard et al., 1996).

Data of this kind provide some grounds upon which to expect that the origins of dismissiveness scores and their contextual meaning and instantiations may vary across groups. Consequently, our expectation was that ethnic moderation of any attachmentwellbeing links might be most strongly evident with regards to dismissing attachment because dismissive characteristics predominate in later life and because they may differentially covary with independence motivations across groups. As noted, African American and Caribbean groups are socialized such that a cultural premium regarding independence is acquired. The maintenance of independence during later life is a particularly pressing concern of African American and Caribbean groups and may enhance wellbeing because of the expression of greater autonomy.

Method

Sample and Procedure

Participants of the current study were 1,118 older, community-dwelling, residents of Brooklyn, New York. They were recruited for a study on stress and coping in older Americans based on a stratified cluster-sampling plan. At the initial stage, data on census blocks were gathered from the Household Income and Race Summary Tape File 3A of the 1990 Census files. Blocks were stratified by ethnic group and on the basis of income (high, medium, and low). Random selection without replacement was used to choose samples of block groups from each stratum. Respondents were interviewed by trained interviewers and received \$20 for their participation. A more detailed overview of recruitment and sampling strategy can be found in Magai et al. (2001). For the current analysis, respondents were grouped into four ethnic classifications – US-born African Americans, US-born European Americans, immigrants from the English-speaking Caribbean (almost exclusively from Jamaica, Trinidad and Tobago, and Barbados), and Eastern Europeans immigrants (predominantly from Russia, the Ukraine and Poland). Because Eastern Slavs are ethnically similar (Althausen, 1996) and several analyses based on these data have shown few differences within the grouping, they were combined for analysis.

Respondents ranged in age from 65 to 86 with a mean age of 74 years. Of the respondents 62% were female and 37% were married or had a partner. Characteristics of the entire sample and the key variables stratified by ethnic group are presented in Table 1.

[Table 1 about here]

Measures

Demographic questionnaire. Demographic information of respondents was collected regarding gender, age, place of birth, self-reported ethnicity, education (measured as total years of schooling), and partner status.

Functional impairment. Functional impairment was used as a control variable because it may be a key influence on wellbeing (Silverstein et al., 1996). Functional impairment was measured with the Comprehensive Assessment and Referral Evaluation (CARE; Golden, Teresi, & Gurland, 1984) as the sum of 39 items referring to functional impairment in different activities of daily living scored on a presence/absence basis. Scores were ranging from no functional impairment to a score of 38. Cronbach's alpha of this scale was .96.

Illness symptoms. In addition to impairment, a health measure based on the objective presence/absence of illness symptoms was obtained with the Comprehensive Assessment and Referral Evaluation (CARE; Golden et al., 1984) as the sum of 150 items referring to various illness symptoms, indexing somatic symptoms, sleep disorder, vision and hearing disorder, and hypertension. Cronbach's alpha of this scale was .96.

Attachment style. Attachment style was measured with the Relationship Scales Questionnaire (RSQ; Bartholomew & Horowitz, 1991), a widely used self-report measure. This questionnaire includes 30 items and intends to measure four different styles of attachment (i.e., secure, fearful avoidant, dismissing, and preoccupied). On a five-point scale, ranging from 1 = not at all like me to 5 = very much like me, respondents rate how well each item describes their characteristic style in close relationships. Because the internal consistency of the four subscales is often quite low in studies using samples of older adults (e.g., Magai et al., 2001), principal component analysis was used to verify the underlying data structure. The results suggested a three factor solution with one factor referring to a secure attachment style, one to a dismissive and a third factor being best described as ambivalent/fearful attachment. In the current study, we used the dimensional ratings of the three attachment styles for all analyses. There is growing trend to favor dimensional ratings because dimensions are statistically more justifiable and continuous scores may provide a better understanding of attachment processes by specifying certain components of internal working models as more essential than other components within particular relationships (Consedine & Magai, 2003). In other words, participants are not either securely of insecurely attached but can have higher and lower scores on the different attachment dimensions. A more detailed overview on theoretical and empirical considerations concerning the use of the RSQ can be found in Consedine and Magai (2003).

Wellbeing. Wellbeing was measured as positive and negative affect with the trait version of the Differential Emotions Scale (DES; Izard, 1971). The DES is a 30 item scale containing three items for each of ten basic emotions: joy, surprise, interest, fear, sadness, anger, contempt, disgust, shame, and guilt. Respondents rated the extent to which each emotion characterized their day-to-day experience on a scale ranging from 1 = rarely or never to 5 = very often. Items referring to joy, surprise, and interest were combined into one scale positive affect. Cronbach's alpha for this scale was .70. The remaining items referring to the other seven basic emotions were combined into the scale negative affect. Cronbach's alpha for this scale was .90. The ratio of positive affect to negative affect was computed indicating a measure of wellbeing.

Statistical Analyses

Analyses of variance or chi-square tests were performed to investigate differences in study variables among the four ethnic groups. Post hoc comparisons were made using the Waller-Duncan test. Pearson correlations were used to calculate bivariate associations among the study variables. Finally, a hierarchical regression was performed to determine the best linear combination of ethnicity and attachment dimensional scores predicting wellbeing. Demographic variables and functional impairment scores were first entered into the regression model as control variables. Next, ethnicity was entered as a series of dummy variables. In a next step the attachment style dimensional scores were added and in the last step the interactions between ethnicity and attachment were included into the model. For the interaction testing, variables were centered and then multiplied, as suggested by Aiken and West (1991).

Results

Demographics, Attachment Dimensions, and Wellbeing Across Ethnic Groups

As can be seen in Table 1, there was ethnic variation in all study variables. Eastern European immigrants to the U.S. had the highest education and a majority was living with a partner. In the other groups, education was considerably lower and fewer respondents (still) had a partner. Functional impairment and illness symptoms were lowest in the group of Caribbean immigrants, probably related to their younger age compared to the other three groups. The Eastern European immigrant group reported the most illness symptoms and functional impairments. This group had the highest scores on the secure attachment dimension and at the same time, the Eastern European group also showed the highest scores on the dismissive attachment dimension. European Americans had higher scores on the ambivalent/fearful attachment dimension compared to African-descent individuals. A more positive affect ratio, reflecting higher wellbeing, was found in the African American and English-speaking Caribbean groups compared to the ethnic groups with European descent.

[Table 1 about here]

Bivariate and Multivariate Predictors of Wellbeing

Table 2 presents the zero/order correlations among the study variables. As can be seen here, wellbeing was negatively associated with functional impairment and illness symptoms. Being Eastern and American European was associated with lower wellbeing whereas being African American or English-speaking Caribbean was related to greater wellbeing among our respondents. Higher scores on the ambivalent/fearful attachment dimension were negatively associated with wellbeing while higher scores on secure and dismissive attachment were not significantly related to wellbeing.

[Table 2 about here]

Table 3 displays the results of the hierarchical regression analysis of wellbeing on demographic control variables, ethnicity, attachment, and the interactions between ethnicity and attachment. Of the control variables, being female, older, and higher educated positively predicted wellbeing while greater illness predicted lower wellbeing. As in the zero-orders, being of African descent, that is U.S.-born African American or English-speaking Caribbean immigrant predicted higher wellbeing compared to being European American.

In the second step, the three attachment dimensions were added to the model and explained an extra 7% of the variance. Higher scores on the secure and dismissive dimensions predicted greater wellbeing whereas ambivalent/fearful attachment predicted lower wellbeing. In a last step, the moderating role of ethnicity in the association between attachment and wellbeing was tested; three interactions were significant, that is the interaction between being African American and dismissive attachment style, the interaction between being Englishspeaking Caribbean and dismissive attachment style, and the interaction between being English-speaking Caribbean and ambivalent/fearful attachment style. The positive effect of dismissive attachment on wellbeing was enhanced among U.S.-born African Americans and persons from the English speaking Caribbean. In other words, older respondents who were either U.S.-born European Americans or Eastern European immigrants, high on dismissiveness, reported lower wellbeing compared to African Americans and Englishspeaking Caribbeans (cf. Figures 1 and 2).

[Figures 1 and 2 about here]

The detrimental effect of higher scores on the ambivalent/fearful dimension was buffered by being an English-speaking Caribbean.

[Figure 3 about here]

Discussion

The current study extends prior knowledge on the link between attachment and wellbeing by investigating ethnic moderation of this association in a large sample of diverse older adults. In addition to investigating distributions of attachment in a diverse older sample, the study specifically tested for a possible moderational role for ethnicity in the association between attachment and wellbeing. Consistent with expectation, secure and dismissive attachment predicted greater wellbeing whereas ambivalent/fearful attachment predicted reduced wellbeing in this older cohort. In addition, our analyses indicated that the positive effect of secure attachment on wellbeing was consistent across the four ethnic groups whereas the positive effect of dismissive attachment and the negative effect of ambivalent/fearful attachment were qualified by ethnicity. Below, we discuss these results more fully, considering the role of age, immigration, and culture in greater detail and revisiting the implications patterns of attachment and ethnicity may have for later life wellbeing. *Ethnic Differences in Attachment and Wellbeing in Later Life*

Consistent with previous research, secure attachment was positively related to wellbeing (Bradley & Cafferty, 2001). However, secure attachment was differently distributed among our ethnic groups, with the Eastern European group reporting the greatest security. Prior work contrasting the same ethnic groups in convenience samples have not suggested substantially greater security among Eastern Europeans (Fiori et al., 2009), although the attachment scoring in this prior study differed somewhat from that employed here. One possibility is that this finding reflects the fact that the majority of our Eastern European respondents still had a partner. Having a partner at older age might point to a more satisfactory and complementary relationship in terms of supporting, relying on and caring for each other. At the same time, however, the Eastern European group also reported the highest dismissive attachment. This finding is consistent with the high dismissive scores in Fiori and colleagues (2009) and may reflect the combination of a historical mistrust and self-reliance motivation coupled with an immigration history likely characterized by the loss of social bonds with the home country, higher socioeconomic pressure, and social network instability. Alternately, living in small ethnic enclaves may promote relative isolation, intensified by growing generational gaps within families (Miller et al., 2006). European Americans had relatively high attachment security (Fiori et al., 2009) and higher scores on the ambivalent/fearful attachment dimension compared to African-descent individuals. European Americans tend to have weaker family networks compared to the African groups, a fact that, in the context of the challenges of aging, may intensify feelings of unwanted dependency and loss of autonomy for European Americans.

Consistent with prior work, our index of wellbeing was greater in the two groups of African descent. Prior studies have suggested reduced negative affective experiences among African-descent minorities (Consedine et al., 2005; Consedine, Magai, Horton, & Brown, 2011) which, when contrasted with the premium placed on emotions and their free expression among Eastern European groups (Wierzbicka, 1992) may lead to a superior ratio. The origins of these differences are, however, complex. Initially, they might be thought to reflect greater functional impairment and ill-health among European Americans and Eastern Europeans – ill-health may create negative affectivity (Consedine & Moskowitz, 2007). The fact that the ethnic effects on wellbeing remained constant across the phases of regression analysis (see Table 3) tends to suggest this interpretation is unlikely. In the section to follow, we consider the role of attachment and whether the links between relational styles and wellbeing outcome vary across groups.

Attachment, Ethnicity and Their Interactions as Predictors of Wellbeing

Consistent with prior work, dismissive attachment was associated with greater wellbeing (Fiori, Consedine, & Merz, 2011) while ambivalent/fearful attachment had a negative link to outcome. Dismissive attachment is characterized by an aversion to emotional intimacies, a lack of trust (Consedine & Magai, 2003) and has been attributed as normative in later life with respect to the preservation of autonomy in response to increasing mental, physical and social limitations (Fiori et al., 2011). Developmentally, however, the more punitive, physical and controlling parenting that appears to characterize African American (Deater-Deckard et al., 1996; Pinderhughes et al., 2000) and Caribbean (Gopaul-McNicol, 1993, 1999) is also thought to lead to the development of dismissive attachment (Montague et al., 2003) and repressive coping (Magai et al., 2004), a style of experiential regulation in which negative affects are ignored, downplayed, or dissociated (Consedine et al., 2011). It is currently unclear whether the current findings regarding attachment-wellbeing links reflect reduced negative affect or elevated positive affect effects.

Finally, the current report tested the possibility that the links between attachment and wellbeing outcome might be moderated by ethnicity. Given the preponderance of dismissive attachment in older cohorts (Diehl et al., 1996; Webster, 1997) and the close links between dismissive attachment and independence/self reliance motivations, we expected that any moderation would be primarily evident with this dimension. Consistent with this expectation, our moderational analysis indicated that being of African descent (i.e., either African American or Caribbean) enhanced the positive relation between dismissive attachment and a more favorable affective balance. Although the absence of prior work means interpretations must be considered preliminary, a few possibilities are evident.

First, the enhanced effect of dismissiveness on wellbeing evident among African Americans and Caribbeans may reflect the slightly different *origins* of dismissive attachment in these groups. Among the two African-descent subsamples, for example, it may be that dismissiveness is less about an independence-when-aging motivation and more a residual carry-over from early socialization experiences in which uncontrolled expressions of emotionality were seriously punished (Deater-Deckard et al., 1996; Pinderhughes et al., 2000). This developmental difference may, in turn, mean that dismissive attachment contains different meaning across the ethnic contexts examined here, being comparatively normative/adaptive among African Americans and Caribbeans but less so among the two European-descent groups for whom it may partially be a response to the challenges of immigration and aging. The wellbeing of European Americans and European immigrants to the U.S. may be less benefitted by dismissive attachment because dismissiveness in their cultures is less adaptive and, in the case of European immigrants, might be due to their immigration history rather than necessarily representing a cultural value. For them, dismissiveness may represent the breakdown of relationships and normative relational styles where among African Americans and Caribbeans it does not.

Second, it is worth further considering immigration history as a possible mechanism behind the varying association between dismissive attachment and wellbeing across groups (see Polek, Van Oudenhoven, & Ten Berge, 2008). Several studies have documented robust cross-cultural differences in patterns of attachment in the course of examining the universal and culture-specific premises of attachment theory (see Van IJzendoorn & Sagi-Schwartz, 2008 for a review). Although little research has specifically examined links between migration experiences and attachment, it is possible that the motivations underpinning the decision to emigrate differ systematically between Caribbean and Eastern European groups. While immigration is likely stressful notwithstanding the country of departure, the motivations for immigration, the relational consequences of relocation, and the degree of discrepancy between original and host cultures may vary between our two immigrant groups. For example, although immigration often results in losses within the original social network in the country of origin (Merz et al., 2009b), such relationships are likely more readily maintained with extended family in the English-speaking Caribbean than they are with persons left behind in the former USSR. Reduced distances and travel-related financial costs are lower and issues with political environments and visas are reduced. Furthermore, persons emigrating from the Caribbean appear differentially likely to be attracted to the U.S. as a destination because of employment opportunities (Salmon, Yan, Hewitt, & Guisinger, 2007) while those emigrating from the former USSR (a predominantly Jewish sample), immigrated in response to serious political issues (Markowitz, 1995), and typically immigrated in family groups (Aroian, Norris, & Chiang, 2003) but without the friendship networks Russians have traditionally relied on (Althausen 1996; Fiori et al., 2008). As such, it may be that while dismissiveness among Caribbeans is indexing self-reliance type motivations (a self-selected immigrant type effect), it indexes conflict and relational mistrust stemming from near-forced immigration and fragmented networks among the Eastern European sample.

Similar interpretative possibilities are evident when considering the final interaction between ethnicity and attachment in the current study – a finding indicating that the typically detrimental effect of ambivalent/fearful attachment on wellbeing was reduced among persons from the English-speaking Caribbean (see Figure 3). While the more negative view of the self, greater rejection sensitivity, pessimistic expectations regarding interpersonal transactions (Kobak et al., 1993; Mikulincer, 1998a; Mikulincer et al., 2003) and increased negative emotionality (Bartholomew & Horowitz, 1991; Kobak & Sceery, 1988 Magai et al., 1995), typifying ambivalent/fearful attachment may explain its main effect on wellbeing such characteristics are insufficient to explain the ethnic interaction. Concerns regarding being hurt, a lack of other availability, trust, and excessive closeness may be less closely related to wellbeing among Caribbean groups because either (a) negative emotionality regarding relationships is less closely linked to overall negative aspects of wellbeing in this group, (b) there is a reduced association between the positive and negative aspects of wellbeing in this group (i.e., both can be present simultaneously), or (c) Caribbean persons report the relational issues and dynamics one would expect to predict negative affectivity but without *experiencing* the same levels of felt emotion.

Given the comparative absence of prior work among Caribbean groups, these possibilities are all somewhat speculative at this point. There are, however, some data consistent with the notion that the experiential or felt aspect of negative emotionality may be suppressed among Caribbeans and, consequently, that this attachment dimension may index slightly different aspects of functioning. A closer inspection of the RSQ items loading on the ambivalent/fearful dimension suggests that it is comprised of anxiety items together with items indexing issues with trust, feeling un-loved, and discomfort with closeness. One possibility then is that total ambivalent/fearful score among Caribbeans is comprised of fewer anxiety-type items with commensurately greater loadings on the other contributing characteristics.

Prior examinations of the affective profiles of Caribbean groups show that rates of affective disorders are generally lower among Caribbean-born groups (Williams et al., 2007), as are reports of most negative emotions (Consedine & Magai, 2002). Although it has been suggested that lower reports reflect desirability issues (Bardwell & Dimsdale, 2001), it has recently been shown that lower reports may reflect the impact of "defended" regulatory styles (Magai et al., 2001), distance and avoidant-based coping (Brantley, O'Hea, Jones, & Mehan, 2002), and repression (Consedine et al., 2011). Recent experimental Stroop-based work suggests that the strict socialization histories among Jamaicans (above) may lead to differentially lower reports of felt anxiety compared to both European American and African American men (Consedine, in press). In the current context, it seems possible that older adults from the Caribbean may report relational dynamics indicative of anxiety but not actually feel the anxiety, thus weakening the association between ambivalent/fearful attachment and affective outcomes.

Limitations and Concluding Remarks

Although representing a useful contribution to our understanding of the relational origins of wellbeing in a diverse later life sample, the current study is not without its weaknesses. First, it should be acknowledged that the sample represents a very specific cohort of individuals. Persons who were teenagers during the Great Depression spent a powerfully formative period of their lives under economic hardship making them hardier, more stoic and with a belief in hard work (Elder, 1974). Developmentally, child-rearing prescriptions during the era of Watsonian behaviourism may explain the prevalence of dismissive attachment (Magai et al., 2001). Our sample is, in short, a very particular cohort. Cohort effects have emerged as factors as in the prediction of a wide range of socioemotional phenomena (Consedine et al., 2005), and whether the effects evident above will generalize to forthcoming cohorts of older adults is unclear.

Second, given the cross-sectional nature of these data, it is possible that patterns of affect balance are causing attachment profiles rather than vice versa. However, given that internal working models (i.e., attachment styles) are relatively *stable* representations of the self and significant others (Merz & Consedine, 2009), it is unlikely that reverse causality is present in our analyses. Third, as the RSQ intends to measure individuals' experiences with respect to close relationships (Roisman et al., 2007b), it is not clear if our measure is accessing the construct of attachment in its full breadth and complexity as the sampling scope of the study meant sacrificing a gold-standard approach to measuring attachment (i.e., using observations or semi-structured interviews). Lifespan assessment of attachment is a complex field and the structure of relational styles across age groups remains an active area of investigation.

In conclusion, the totality of the presented theory and data suggest that secure attachment has a consistently positive relation with affective wellbeing of older adults across ethnic groups and cultures (cf. Merz & Consedine, 2009). With respect to insecure attachment styles, the emerging picture is less clear and future research delving into the cultural and immigration-specific histories of various ethnic groups is certainly warranted. This initial report offers a beginning for studies examining cross-cultural, later life attachment processes.

Although the data are complex, they do suggest a general beneficial effect of secure attachment on wellbeing and point to different associations between insecure attachment dimensions and wellbeing for different ethnicities. Given the importance of attachment patterns to wellbeing across the lifespan, also at old age, work detailing when universal and when cultural-specific mechanisms, especially in times of growing migration, are at work is a

key agenda for social scientists.

References

- Ahnert, L., Gunnar, M. R., Lamb, M. E., & Barthel, M. (2004). Transition to child care: Associations with infant-mother attachment, infant negative emotion, and cortisol elevations. *Child Development*, 75, 639-650.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. Caldwell & H. Ricciutti (Eds.), *Review of child development research* (3rd ed., pp. 1-94). Chicago: University of Chicago Press.
- Ajrouch, K. J., Antonucci, T. C., & Janevic, M. R. (2001). Social networks among Blacks and Whites: The interaction between race and age. *Journals of Gerontology: Series B: Social Sciences, 56B*, S112-S118.
- Althausen, L. (1996). Russian families. In M. McGoldrick, J. Giordano, & J. K. Pearce (Eds.), *Ethnicity and family therapy* (2nd ed., pp. 680-687). New York: Guilford.
- Aroian, K. J., Norris, A. E., & Chiang, L. (2003). Gender differences in psychological distress among immigrants from the former Soviet Union. Sex Roles, 48, 39-51.
- Baltes, M. M. (1996). *The many faces of dependency in old age*. Cambridge, NY: Cambridge University Press.
- Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., & Kroonenberg, P. M. (2004).
 Differences in attachment security between African-American and white children:
 Ethnicity or socio-economic status? *Infant Behavior and Development*, 27, 417-433.
- Bardwell, W. A., & Dimsdale, J. E. (2001). The impact of ethnicity and response bias on the self-report of negative affect. *Journal of Applied Biobehavioral Research*, *6*, 27-38.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality & Social Psychology*, *61*, 226-244.

Bodner, E., & Cohen-Fridel, S. (2010). Relations between attachment styles, ageism and quality of life in late life. *International Psychogeriatrics*, *22*, 1353-1361.

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1. Attachment. New York: Basic Books.

Bowlby, J. (1979). The making and breaking of affectional bonds. London: Tavistock.

- Bradley, J. M., & Cafferty, T. P. (2001). Attachment among older adults: Current issues and directions for future research. *Attachment & Human Development*, *3*, 200-221.
- Brantley, P. J., O'Hea, E. L., Jones, G., & Mehan, D. J. (2002). The influence of income level and ethnicity on coping strategies. *Journal of Psychopathology & Behavioral Assessment*, 24, 39-45.
- Brody, G. H., & Flor, D. L. (1998). Maternal resources, parenting practices and child competence in rural, single-parent African American families. *Child Development*, 69, 803-816.
- Collins, N. L. (1996). Working models of attachment. Implications for explanation, emotion and behavior. *Journal of Personality and Social Psychology*, *71*, 810-832.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, 78, 1053-1073.
- Consedine, N. S. (in press). Are we worrying about the right men and are the right men feeling worried? Conscious but not unconscious prostate anxiety predicts screening among men from three ethnic groups. *American Journal of Men's Health*.
- Consedine, N. S., & Fiori, K. L. (2009). Gender moderates the associations between attachment and discrete emotions in late middle age and later life. *Aging & Mental Health*, *13*, 847-862.

- Consedine, N. S., & Magai, C. (2002). The uncharted waters of emotion: Ethnicity, trait emotion and emotion expression in older adults. *Journal of Cross-Cultural Gerontology*, *17*, 71-100.
- Consedine, N. S., & Magai, C. (2003). Attachment and emotion experience in later life: The view from emotions theory. *Attachment & Human Development*, *5*, 165-187.
- Consedine, N. S., Magai, C., Horton, D. E., & Brown, W. M. (2011). The affective paradox: an emotion regulatory account of ethnic differences in self-reported anger. *Journal of Cross-Cultural Psychology*. doi:10.1177/0022022111405659.
- Consedine, N. S., Magai, C., & Krivoshekova, Y. S. (2005). Sex and age cohort differences in patterns of socioemotional functioning in older adults and their links to physical resilience. *Ageing International, 30*, 209-244.
- Consedine, N. S., Magai, C., & Horton, D. (2005). Ethnic variation in the impact of emotion and emotion regulation on health: A replication and extension. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 60*, P165-P173.
- Consedine, N. S., & Moskowitz, J. T. (2007). The role of discrete emotions in health outcomes: a critical review. *Journal of Applied and Preventive Psychology*, *12*, 59-75.
- Davila, J., Burge, D., & Hammen, C. (1997). Why does attachment style change? *Journal of Personality and Social Psychology*, 73, 826-838.
- Deater-Deckard, K., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1996). Physical discipline among African American and European American mothers: Links to children's externalizing behavior. *Developmental Psychology*, 32, 1065-1072.
- Diehl, M., Elnick, A. B., Bourbeau, L. S., & Labouvie-Vief, G. (1998). Adult attachment styles: Their relations to family context and personality. *Journal of Personality and Social Psychology*, 74, 1656-1669.

- Elder, G. H. (1974). *Children of the Great Depression: Social change in life experiences*. Chicago: University of Chicago Press.
- Feeney, J. A. (1999). Adult romantic attachment and couple relationships. In J. Cassidy & P.
 R. Shaver (Eds.), *Handbook of attachment. Theory, research, and clinical applications* (pp. 355-377). New York/London: Guilford.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, *38*, 281-291.
- Fiori, K. L., Consedine, N. S., & Magai, C. (2008). Ethnic differences in patterns of social exchange among older adults: The role of resource context. *Ageing & Society*, 28, 495-524.
- Fiori, K. L., Consedine, N. S., & Magai, C. (2009). Late life attachment in context: Patterns of relating among men and women from seven ethnic groups. *Journal of Cross Cultural Gerontology*, 24, 121-141.
- Fiori, K. L., Consedine, N. S., & Merz, E.-M. (2011). Attachment, social network size, and patterns of social exchange in later life. *Research on Aging*, *33*, 465-493.
- Garcia Coll, C. T. (1990). Developmental outcome of minority infants: A process-oriented look into our beginnings. *Child Development*, *61*, 270-289.
- Golden, R. R., Teresi, J. A., & Gurland, B. J. (1984). Development of indicator scales for the comprehensive assessment and referral evaluation (CARE). *Journal of Gerontology*, *39*, 138-146.

Gopaul-McNicol, S. (1993). Working with West Indian families. New York, NY: Guilford.

- Gopaul-McNicol, S. (1999). Ethnocultural perspectives on childrearing practices in the Caribbean. *International Social Work*, 42, 79-86.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.

Howes, C. (1999). Attachment relationships in the context of multiple caregivers. In J.
Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory and research* (pp. 671-687). New York, NY: Guilford.

Izard, C. E. (1971). The face of emotion. New York: Appleton-Century-Crofts.

- Kachadourian, L. K., Fincham, F., & Davila, J. (2004). The tendency to forgive in dating and married couples: The role of attachment and relationship satisfaction. *Personal Relationships*, 11, 373-393.
- Kafetsios, K., & Sideridis, G. D. (2006). Attachment, social support and well-being in young and older adults. *Journal of Health Psychology*, *11*, 863-875.
- Kelley, M. L., Power, T. G., & Wimbush, D. D. (1992). Determinants of disciplinary practices in low-income Black mothers. *Child Development*, 63, 573-582.
- Kobak, R. R., Cole, H. E., Ferenz-Gillies, R., Fleming, W. S., & Gamble, W. (1993).
 Attachment and emotion regulation during mother-teen problem solving: A control theory analysis. *Child Development*, *64*, 231-245.
- Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development*, *59*, 135-146.
- Kochanska, G., & Coy, K. C. (2002). Child emotionality and maternal responsiveness as predictors of reunion behaviors in the strange situation: Links mediated and unmediated by separation distress. *Child Development*, 73, 228-240.
- Lee, G. R., & Ellithorpe, E. (1982). Intergenerational exchange and subjective well-being among the elderly. *Journal of Marriage and the Family, 44,* 217-224.
- Levin, J. S., Taylor, R. J., & Chatters, L. M. (1994). Race and gender differences in religiosity among older adults: Findings from four national surveys. *Journals of Gerontology: Social Sciences*, 49, 5137-5145.

- Lowenstein, A., & Katz, R. (2005). Living arrangements, family solidarity and life satisfaction of two generations of immigrants in Israel. *Ageing & Society, 25*, 749-767.
- Magai, C. (2008). Attachment in middle and later life. In J. Cassidy & P. R. Shaver (Eds.),
 Handbook of attachment. Theory, research, and clinical applications (2nd ed., pp. 532-551). London/New York: Guilford.
- Magai, C., Cohen, C., Milburn, N., Thorpe, B., McPherson, R., & Peralta, D. (2001).
 Attachment styles in older European American and African American adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 56*, S28-S35.
- Magai, C., & Consedine, N. S. (2004). Introduction to the special issue: Attachment and aging. *Attachment & Human Development*, *6*, 349-351.
- Magai, C., Consedine, N. S., Adjei, B. A., Hershman, D., & Neugut, A. (2008). Psychosocial influences on suboptimal adjuvant breast cancer treatment adherence among African American women: Implications for education and intervention. *Health Education & Behavior, 35*, 835-854.
- Magai, C., Consedine, N. S., Gillespie, M., O'Neal, C., & Vilker, R. (2004). The differential roles of early emotion socialization and adult attachment in adult emotional experience: Testing a mediator hypothesis. *Attachment and Human Development*, *6*, 389-419.
- Magai, C., Consedine, N. S., Krivoshekova, Y. S., Kudadjie-Gyamfi, E., & McPherson, R.
 (2006). Emotion experience and expression across the adult lifespan: Insights from a multi-modal assessment study. *Psychology & Aging*, 21, 303-317.
- Magai, C., Distel, N., & Liker, R. (1995). Emotion socialization, attachment and patterns of adult emotional traits. *Cognition & Emotion*, *9*, 461-481.

- Markowitz, F. (1995). Criss-crossing identities: the Russian Jewish Diaspora and the Jewish Diaspora in Russia. *Diaspora: A Journal of Transnational Studies, 4*, 201-210.
- Merz, E.-M. (2010). *Caring for our loved ones? An attachment perspective on solidarity betweeen generations*. Saarbrücken, Germany: Lambert Academic Publishing.
- Merz, E.-M., & Consedine, N. S. (2009). The association of family support and wellbeing in later life depends on attachment style. *Attachment & Human Development*, 11, 203-221.
- Merz, E.-M., Consedine, N. S., Schulze, H.-J., & Schuengel, C. (2009). Wellbeing of adult children and ageing parents: associations with intergenerational support and relationship quality. *Ageing & Society*, 29, 783-802.
- Merz, E.-M., Özeke-Kocabas, E., Oort, F. J., & Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology*, 23, 291-300.
- Merz, E.-M., Schuengel, C., & Schulze, H.-J. (2007). Intergenerational solidarity: An attachment perspective. *Journal of Aging Studies*, *21*, 175-186.
- Mikulincer, M. (1998a). Adult attachment style and affect regulation: Strategic variations in self-appraisals. *Journal of Personality and Social Psychology*, 75, 420-435.
- Mikulincer, M. (1998b). Adult attachment style and individual differences in functional versus dysfunctional experiences of anger. *Journal of Personality and Social Psychology*, 74, 513-524.
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.

- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment style, coping strategies and posttraumatic psychological distress. The impact of the gulf-war in Israel. *Journal of Personality and Social Psychology*, 64, 817-824.
- Mikulincer, M., Gillath, O., Halevy, V., Avihou, N., Avidan, S., & Eshkoli, N. (2001).
 Attachment theory and reactions to others' needs: Evidence that activation of the sense of attachment security promotes empathic responses. *Journal of Personality and Social Psychology*, *81*, 1205-1224.
- Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness the accessibility and architecture of affective memories. *Journal of Personality and Social Psychology*, 68, 917-925.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: the dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27, 77-102.
- Miller, A. M., Sorokin, O., Wang, E., Feetham, S., Choi, M., & Wilbur, J. (2006). Acculturation, social alienation, and depressed mood in midlife women from the former Soviet Union. *Research in Nursing & Health*, 29, 134-146.
- Montague, D. P. F., Magai, C., Consedine, N. S., & Gillespie, M. (2003). Attachment in African American and European American older adults: The role of early life socialization and religiosity. *Attachment & Human Development*, *5*, 188-241.
- Pinderhughes, E. E., Dodge, K. A., Bates, J. E., Pettit, G. S., & Zelli, A. (2000). Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes. *Journal of Family Psychology*, *14*, 380-400.
- Polek, E., Van Oudenhoven, J. P., & Ten Berge, J. M. F. (2008). Attachment styles and demographic factors as predictors of sociocultural and psychological adjustment of

Eastern European immigrants in the Netherlands. *International Journal of Psychology*, 43, 919-928.

- Roisman, G. I., Fraley, R. C., & Belsky, J. (2007a). A taxometric study of the Adult Attachment Interview. *Developmental Psychology*, 43, 675-686.
- Roisman, G. I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. (2007b). The adult attachment interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology*, *92*, 678-697.
- Salmon, M. E., Yan, J., Hewitt, H., & Guisinger, V. (2007). Managed migration: The Caribbean approach to addressing nursing services capacity. *Health Services Research*, 42, 1354-1372
- Schulze, H.-J., Tyrell, H., & Künzler, J. (1989). Vom Strukturfunktionalismus zur
 Systemtheorie der Familie [From structural functionalism to systems theory of the family]. In R. Nave-Herz & M. Markefka (Eds.), *Handbuch der Familien- und Jugendforschung, Band I, Familienforschung* [Handbook of family and youth research, Vol. 1. Family research] (pp. 31-43). Neuwied/Frankfurt, Germany: Luchterhand.
- Silverstein, M., Chen, X., & Heller, K. (1996). Too much of a good thing? Intergenerational social support and the psychological well-being of older parents. *Journal of Marriage and the Family, 58*, 970-982.
- Steele, H., Phibbs, E., & Woods, R. T. (2004). Coherence of mind in daughter caregivers of mothers with dementia: Links with their mothers' joy and relatedness on reunion in a strange situation. *Attachment & Human Development*, 6, 439-450.
- Thompson, R. A. (2008). Early attachment and later development. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment. Theory, research, and clinical application* (2nd ed., pp. 348-365). London/New York: Guilford.

- Van IJzendoorn, M. S., & Bakermans-Kranenburg, M. J. (1996). Attachment representations in mothers, fathers, adolescents, and clinical groups: A meta-analytic search for normative data. *Journal of Consulting and Clinical Psychology*, 64, 8-21.
- Van IJzendoorn, M H., & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook* of attachment. Theory, research, and clinical applications (2nd ed., pp. 880-905). London/New York: Guilford.
- Verschueren, K., Marcoen, A., & Schoefs, V. (1996). The internal working model of the self, attachment, and competence in five-year-olds. *Child Development*, *67*, 2493-2511.
- Webster, J. D. (1997). Attachment style and well-being in elderly adults: A preliminary investigation. *Canadian Journal on Aging – Revue Canadienne du Vieillissement, 16*, 101-111.
- Wierzbicka, A. (1992). Semantics, culture and cognition: Universal concepts in culturespecific configurations. New York: Oxford University Press.
- Williams, D. R., González, H. M., Neighbors, H., Nesse, R., Abelson, J. M., Sweetman, J., et al. (2007). Prevalence and distribution of major depressive disorder in African
 Americans, Caribbean blacks, and non-Hispanic whites: Results from the National
 Survey of American Life. *Archives of General Psychiatry*, 64, 305-315.
- Willemen, A. M., Schuengel, C., & Koot, H. M. (2009). Physiological regulation of stress in referred adolescents: the role of the parent-adolescent relationship. *Journal of Child Psychology and Psychiatry*, 50, 482-490.

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Table 1

Demographics, Attachment and Wellbeing Characteristics Broken Down by Ethnic Group

				English-	Eastern			
		Entire	African	speaking	European	European	$\chi 2$ or F	
		Sample	American	Caribbean	Immigrant	American	df = (3,	Ethnic Post-hoc
Variable	Range	(<i>N</i> = 1,117)	(<i>n</i> = 236)	(<i>n</i> = 435)	(<i>n</i> = 173)	(<i>n</i> = 273)	1113)	Comparison
Gender (% female)	0/1	61.68	64.41	60.23	64.74	59.71	2.26 (ns)	
Age (<i>M</i> , <i>SD</i>)	65-86	73.83 (5.93)	74.41 (6.07)	72.69 (5.65)	73.09 (5.85)	75.63 (5.79)	16.10***	EA, AA > EE, EC
Education (M, SD)	0-23	11.45 (3.69)	10.40 (3.26)	10.65 (3.17)	13.82 (4.91)	12.11 (3.08)	44.28***	EE > all; EA > EC, AA
Partner (% yes)	0/1	36.97	23.31	39.31	57.80	31.87	55.21***	EE > all; EC, EA > AA
Functional impairment (M, SD)	0-38	1.54 (1.74)	1.58 (1.86)	1.06 (1.64)	2.03 (1.66)	1.94 (1.65)	21.46***	EE, EA > AA > EC
Illness symptoms (M, SD)	0-105	4.28 (2.05)	4.41 (1.94)	3.47 (2.01)	5.50 (2.00)	4.68 (1.67)	53.28***	EE > all; EA, AA > EC
Secure (M, SD)	1-5	2.68 (0.99)	2.40 (0.79)	2.38 (0.94)	3.44 (.85)	2.91 (0.97)	69.70***	EE > all; EA > AA, EC
Dismissive (M, SD)	1-5	3.72 (0.80)	3.70 (0.76)	3.72 (0.76)	3.90 (.80)	3.60 (0.86)	5.02**	EE > all
Ambivalent/fearful (M, SD)	1-5	1.94 (0.69)	1.90 (0.69)	1.90 (0.72)	1.93 (.61)	2.05 (0.69)	2.98*	EA > AA, EC
Wellbeing (M, SD)	-1.87-3.08	1.74 (0.58)	1.91 (0.58)	1.85 (0.60)	1.50 (0.45)	1.56 (0.49)	33.77***	AA, EC $>$ EA, EE

Note. Gender and partner are dummy coded, such that 1 = female, having a partner. AA = US-born African American, EC = English Speaking

Caribbean, EE = Eastern European Immigrant, EA = US-born European American. * p < .05, ** p < .01, *** p < .001.

Table 2

Correlations among Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender													
2. Age	.12***												
3. Education	.01	13***											
4. Partner	30***	17***	.15***										
5. Functional impairment	.18***	.23***	03	12***									
6. Illness Symptoms	.23***	.15***	.07*	05	.73***								
7. European American	-	.17***	.10***	-	.13***	.11***							
8. African American	-	.05	15***	-	.01	.03	-						
9. Eastern European	-	05	.28***	-	.12***	.26***	-	-					
10. English Caribbean	-	15***	17***	-	22***	31***	-	-	-				
11. Secure	03	.02	.13***	.17***	.12***	.19***	.14***	14***	.33***	24***			
12. Dismissive	.10***	.03	.08**	07*	.07*	.06*	08**	01	.10***	.00	.05		
13. Ambivalent/fearful	.04	.03	02	11***	.15***	.19***	.09**	03	00	05	.11***	.25***	
14. Wellbeing	.02	.02	.05	.00	23***	29***	18***	.15***	18***	.16***	05	.04	30***

Note. Gender and partner are dummy coded, such that 1 = female, having a partner. * p < .05, ** p < .01, *** p < .001.

Table 3

Regression Models Explaining Wellbeing among Ethnic Groups and Attachment Styles

Predictor		Step 1	l	Step 2			Step 3			
		<i>F</i> = 29.19			<i>F</i> = 18.60					
	В	SE B	β	В	SE B	β	В	SE B	β	
Gender	.09	.04	.08**	.08	.03	.06*	.06	.03	.05	
Age	.01	.00	.10**	.01	.00	.09**	.01	.00	.08**	
Education	.02	.01	.15***	.02	.00	.13***	.02	.00	.13***	
Partner	.05	.04	.04	.00	.04	.00	01	.03	00	
Functional impairment	02	.01	05	02	.01	05	01	.01	04	
Illness symptoms	07	.01	23***	05	.01	19***	05	.01	19***	
European American (Ref)										
African American	.37	.05	.27***	.36	.05	.26***	.35	.05	.25***	
Eastern European immigrants	04	.05	02	12	.05	07*	05	.06	03	
English Caribbean	.26	.04	.22***	026	.04	.22***	.27	.04	.23***	
Secure				.06	.02	.11***	.05	.03	.08	

Dismissive	.06	.02	.10***	.02	.03	.03
Ambivalent/fearful	16	.02	27***	22	.03	38***
African American*secure				02	.05	01
Eastern European *secure				05	.06	04
English Caribbean*secure				.06	.04	.06
African American*dismissive				.09	.05	$.07^{+}$
Eastern European*dismissive				06	.05	04
English Caribbean*dismissive				.10	.04	.10*
African American*ambivalent/fearful				.04	.05	.03
Eastern European*ambivalent/fearful				.04	.05	.03
English Caribbean*ambivalent/fearful				.08	.04	.09*

Note. Gender and partner are dummy coded, such that 1 = female, having a partner.

 $R^2 = .17$ for Step1; $\Delta R^2 = .07$ for Step 2 (p < .001); $\Delta R^2 = .02$ for Step 3 (p < .001). Total $R^2 = .26$.

 $p^{+} p = .06, * p < .05, ** p < .01, *** p < .001.$



Figure 1. Interaction between African American and dismissive attachment style.



Figure 2. Interaction between English-speaking Caribbean and dismissive attachment style.



Figure 3. Interaction between English-speaking Caribbean and ambivalent/fearful attachment style.

Figure Caption

Figure 1. Interaction between African American and dismissive attachment style.

Figure 2. Interaction between English-speaking Caribbean and dismissive attachment style.

Figure 3. Interaction between English-speaking Caribbean and ambivalent/fearful attachment style.