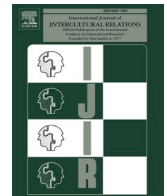




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Attachment style and romantic involvement with host nationals influence migrants' acculturation and adjustment

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ABSTRACT

Many migrants experience cultural transitions alongside a romantic partner, yet relatively few studies have examined the relationship context of acculturation and adjustment. The primary goal of the present study was to examine whether partners' anxious and avoidant attachment – fearing abandonment or closeness in relationships, respectively – predicted their acculturation orientations and sociocultural, psychological, and relational adjustment. A secondary goal was to examine whether being romantically involved with a host national eased the process of acculturation. Toward this end, we collected dyadic daily diary data over a 14-day period from 146 couples ($N = 292$), of whom at least one partner was a recent migrant to the UK. We found that when migrants were higher in avoidant attachment, they – and their partners – reported the poorest acculturative outcomes: lower mainstream British identification and heritage culture identification, and lower sociocultural, psychological, and relational adjustment. When migrants were higher in attachment anxiety, they reported poorer psychological, sociocultural, and relational adjustment; when their partners were higher in anxiety, migrants reported worse outcomes across the board. Furthermore, migrants with a British partner reported greater mainstream British identification and sociocultural adjustment compared to migrants without a British partner. A follow-up 7.5 years later found that migrants who were higher in attachment anxiety and did not have a British partner at Time 1 were more likely to have left the UK by Time 2. Based on these findings, we encourage researchers, clinicians, and policy-makers to take migrants' relationship context into account to better understand their acculturation and adjustment.

Moving to a new country can be one of life's most stressful experiences (Berry, 2006; Safdar & Lay, 2003; Ward et al., 2021). Do romantic relationships amplify or mitigate this stress? On the one hand, a person's deepest relationship insecurities might *increase* their stress: they might worry that their romantic partner doesn't really love them and will abandon them in the new country, or they might fear that their romantic partner wants too much closeness and will stifle their independence post-migration. On the other hand, a romantic partner might *ease* stress: involvement with a citizen of the settlement country might help migrants to learn the new language, customs, and norms, or a partner from their country of origin might help them to maintain their heritage culture traditions, comforts, and social networks. The purpose of the present study was to assess the relationship characteristics of migrants to the UK that facilitated their adoption of the new culture, maintenance of their old culture, and optimal adjustment to their cultural transition.

The UK has been an immigrant-receiving country for centuries, but net immigration only exceeded net exportation in the 1990s (Sommerville & Walsh, 2021). Since the EU referendum in 2016, EU immigration has decreased while non-EU immigration has

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increased (Migration Observatory, 2022). Some migrants can live and work in the UK because their romantic partner is a citizen or permanent resident of the UK (i.e., a host national). For example, the UK issued more than 25,000 partner visas in 2022 (Home Office, 2022). Because people often migrate as a couple or family rather than as an individual (Rapaport et al., 2021), and romantic partners can be an important source of social support during times of stress (Dooley et al., 2018), or, conversely, a source of additional stress (Overall et al., 2022), it is important to more fully understand the ways that romantic relationships influence acculturation and adjustment.

Attachment theory may help to explain romantic partners' responses to cultural transitions. This theory is often deployed to understand a wide range of interpersonal phenomena (Mikulincer & Shaver, 2019; Sutton, 2019), including reactions to stressful situations (Pietromonaco & Overall, 2021). However, relatively less research has drawn on attachment theory to understand intergroup relations and social/cultural identity (e.g., Carnelley & Boag, 2019; Ferenczi & Marshall, 2013; Mikulincer & Shaver, 2001; Smith et al., 1999; Tropp, 2021). Even less research has used attachment theory to understand the cultural identification and adjustment of migrants, despite the important role attachment can play in their stress (Li et al., 2021). Insofar as insecurely-attached migrants adjust poorly to cultural transitions, they may experience costs at the individual level, such as a decline in mental and physical health (Incollingo Rodriguez et al., 2022). There may also be costs at the societal level (Rapaport et al., 2021): stressed migrants have a greater likelihood of returning to their country of origin (Berry et al., 1987), resulting in economic, social, and cultural costs to the receiving society (Wahba, 2021).

What we do know about the links between attachment and acculturation is largely based on cross-sectional methods (Bakker et al., 2004; Polek et al., 2008; Polek et al., 2010; Van Oudenhoven & Hofstra, 2006; Wang et al., 2022; Wang & Mallinckrodt, 2006). Because cross-sectional methods have limited causal inference, scholars have called for the greater use of longitudinal designs to test these links (Gouin & MacNeil, 2019; Sochos & Diniz, 2012), consistent with the increasing use of these designs in the wider acculturation literature (e.g., Geeraert et al., 2021; Lefringhausen et al., 2022). Daily diary methods, a type of intensive longitudinal design, are relatively uncommon in acculturation research, even though they confer the benefits of ecological validity, statistical power, minimization of retrospection, and the ability to capture dynamic processes as they unfold in real time (Bolger & Laurenceau, 2013). Furthermore, the acculturation literature has been relatively slow to adopt dyadic approaches – i.e., collected data from two people in a relationship – to test the associations of *both* partners' characteristics with their acculturation attitudes and adjustment (Rapaport et al., 2021; Marshall, 2010; Sun et al., 2022; Wang-Schweig & Miller, 2021). We sought to fill these research gaps through a dyadic daily diary design that allowed us to test whether day-to-day fluctuations in one partner's attachment anxiety and/or avoidance contributed to variance in one's own and one's partner's acculturation and adjustment, and through a follow-up approximately 7.5 years later. This design is consistent with evidence of day-to-day variability in attachment patterns in response to relationship events like conflict or perceived acceptance (Dugan et al., 2023; Haak et al., 2017; Kaurin et al., 2022). We begin by reviewing theoretical perspectives on attachment, acculturation, and adjustment, and then outline the ways that these constructs may be connected.

Attachment theory

Attachment theory suggests that an infant's interactions with a primary caregiver help to shape internal working models of self and other across the lifespan, influencing individual differences in affect, cognition, and behavior (Bowlby, 1973; Sutton, 2019). When caregivers are inconsistently available and responsive to an infant's distress, the infant is more likely to develop an anxious attachment style, defined by positive models of others and a negative model of the self (Bartholomew & Horowitz, 1991). As adults, highly anxious individuals doubt that they are worthy of love, fear abandonment, and engage in hyperactivated proximity-seeking when an attachment figure is perceived as unavailable (Campbell & Marshall, 2011). Caregivers who are neither available nor responsive are more likely to foster avoidant attachment in their children, which, in adult relationships, manifests as reluctance to seek closeness or to depend on others, preferring instead to be self-reliant and emotionally distant (Debrot et al., 2021). Attachment anxiety and avoidance tend to be conceptualized by researchers as two independent dimensions, with the low ends of both dimensions representing attachment security (Fraley et al., 2000). Next, we review research that has linked attachment styles with acculturation and adjustment.

Acculturation orientations and adjustment

Acculturation refers to the process of mutual change between cultural groups resulting from sustained contact (Lefringhausen et al., 2022; Redfield et al., 1936). For individuals, acculturation includes changes in identity, values, attitudes, and behaviors (Sam & Berry, 2010). According to Berry, (1980) bidimensional model of acculturation, migrants must decide to what extent they wish to maintain their culture of birth or upbringing (heritage culture), and to what extent they wish to pursue contact and participation with the dominant host culture (mainstream culture). Orientations toward heritage and mainstream culture involvement comprise independent dimensions (Ryder et al., 2000), and are associated with related but distinct types of cross-cultural adjustment (Ward & Kennedy, 1994). *Psychological adjustment* refers to a migrant's mental health and well-being in the new cultural context (Searle & Ward, 1990), and is measured with indices such as satisfaction with life, frequent positive affect and infrequent negative affect, low levels of depression, and ability to cope with the stress of the cultural transition. *Sociocultural adjustment*, on the other hand, refers to a migrant's acquisition of new behavioral strategies that enable everyday functioning and the ability to fit in to the new culture (i.e., cultural competence or culture learning), such as language ability, adaptation to local customs, and the quantity and quality of contact with members of the dominant group (Wilson et al., 2017).

Relational adjustment – the quality of a migrant's intimate relationships in the new cultural context (Kang, 2006; Orengo-Aguayo,

2015; Pandya, 2021) – might be considered an additional index of migrants' adaptation. It is distinct from sociocultural adjustment because relationships are often with pre-migration partners from the same heritage culture (i.e., co-nationals). Due to the stress of migration and acculturation, romantic partners might experience poorer relational adjustment in the form of marital distress, conflict, and breakup (Flores et al., 2004; Santos et al., 1998).

Heritage culture involvement tends to be more strongly associated with psychological adjustment, and mainstream culture involvement with sociocultural adjustment (Ward & Rana-Deuba, 1999). Greater mainstream *and* heritage involvement – i.e., Berry's (1980) acculturation attitude of *integration* – tends to be associated with optimal psychological and sociocultural adjustment (Berry et al., 2006; Nguyen & Benet-Martínez, 2013), though other work challenges these associations (Bierwiazzonek & Kunst, 2021). Less is known, however, about the links between heritage and mainstream orientations with relational adjustment (Cruz et al., 2014; Sun et al., 2022). The current study is novel because it examines the association of attachment styles with acculturation orientations and, in turn, with psychological, sociocultural, *and* relational adjustment.

Link between attachment styles, acculturation orientation, and adjustment

Attachment styles predict migrants' acculturation attitudes and adjustment more strongly than demographic variables (Polek et al., 2008) and the Big Five personality traits (Bakker et al., 2004), yet relatively few studies have examined acculturation from an attachment theory perspective. Attachment relationships promote self- and emotional regulation through the major functions of proximity seeking, safe haven, and secure base (Simpson et al., 2021) – all of which may help to ease the stress of cultural transitions for new migrants. For example, migrants who engage in *proximity seeking* with an attachment figure who provides a *safe haven* may be better able to regulate distressed emotions; furthermore, an attachment figure may provide a *secure base* from which to explore the new cultural world (Wang & Mallinckrodt, 2006; Wang et al., 2022). Next, we elaborate on the ways these attachment functions – and when they go awry – explain the associations of anxiety and avoidance with cross-cultural adjustment.

Attachment anxiety. Anxious individuals' poor affect regulation and dysfunctional coping in the face of stress (Clear et al., 2020) suggests that they might adjust poorly to cross-cultural transitions. Their fear of rejection and more negative attitudes toward out-group members (Mikulincer & Shaver, 2001) may inhibit the seeking of social contact with members of the mainstream culture (Tropp, 2021) and result in poorer satisfaction with relationships in the new culture (Gouin & MacNeil, 2019). Moreover, because anxious individuals tend to cling to their attachment figure at the expense of exploration (Ainsworth & Bell, 1970; Green & Campbell, 2000; Martin et al., 2010), they may be less likely to explore the new mainstream cultural environment.

Accordingly, anxious attachment is negatively associated with mainstream culture involvement, psychological adjustment, and sociocultural adjustment (Bakker et al., 2004; Ferenczi & Marshall, 2016; Li et al., 2021; Polek et al., 2008; Polek et al., 2010; Van Oudenhoven & Hofstra, 2006; Wang et al., 2022; Wang & Mallinckrodt, 2006). Under conditions of attachment threat, highly anxious people tend to identify *less* with in-group members as they focus more energy on seeking proximity with their romantic partner (Crisp et al., 2009), suggesting that they may identify *less* with people from their heritage culture on days they are particularly worried about romantic rejection. Given that attachment anxiety is associated with poorer relationship quality in non-migrant couples (Joel et al., 2020), we surmised that it would also be associated with poorer relationship adjustment in *migrant* couples and a greater chance of breakup. Based on these findings, we advanced the following hypothesis:

Hypothesis 1. Attachment anxiety will be negatively associated with (a) mainstream culture identification, (b) heritage culture identification, (c) sociocultural adjustment, (d) psychological adjustment, (e) relational adjustment, (f) the likelihood of remaining in the UK, and (g) the likelihood of remaining in the relationship.

Attachment avoidance. Avoidant individuals' mistrust of others and aversion to intimacy may explain why avoidant migrants are less likely to have social contact with members of both the heritage and mainstream cultures (Polek et al., 2010) or to reach out to people or to organizations if they experience acculturative stress (Wang & Mallinckrodt, 2006). That avoidant individuals tend to be low in curiosity and lack interest and enjoyment in exploration (Aspelmeier & Kerns, 2003; Green & Campbell, 2000; Martin et al., 2010) may also mean that avoidant migrants are less likely to explore and become involved in the new mainstream cultural environment.

Accordingly, several studies have found that avoidance is negatively associated not only with mainstream and heritage culture orientations but also with psychological and sociocultural adjustment (Bakker et al., 2004; Ferenczi & Marshall, 2013; Polek et al., 2008; Ponciano et al., 2022; Wang et al., 2022). Furthermore, because attachment avoidance is negatively associated with relationship quality in non-migrant couples (Joel et al., 2020), we expected it to also be associated with lower relational adjustment in *migrant* couples, for whom the stress of acculturation may increase relationship distress, conflict, and breakup (Flores et al., 2004; Santos et al., 1998). Based on our review of the literature, we made the following hypothesis:

Hypothesis 2. Attachment avoidance will be negatively associated with (a) mainstream culture identification, (b) heritage culture identification, (c) sociocultural adjustment, (d) psychological adjustment, (e) relational adjustment, (f) the likelihood of remaining in the UK, (g) the likelihood of remaining in the relationship.

Influence of host national romantic partner

In addition to testing the influence of partners' attachment styles, we also examined whether romantic involvement with a host national influenced acculturation and adjustment. Despite the considerable research literature on partners who differ from each other

in their ethnic or cultural background, relatively few studies have directly addressed partner differences in migration (Uhlich et al., 2022). We sought to extend this research by investigating whether intercultural couples (e.g., one partner is acculturating to the other partner's heritage culture) differed from monocultural couples (e.g., both partners are acculturating to the new mainstream culture) in their acculturation and adjustment.

A review of this literature revealed, first, that migrants involved in an intercultural relationship with a host national tend to be higher in mainstream culture adoption than migrants involved in a monocultural relationship (Lee et al., 2017). A host national partner may help one to learn the language, customs, and values of the new culture; this greater mainstream culture adoption and sociocultural adjustment, in turn, may mean they are more likely to remain in the new country over the long-term. There is little acculturation research that addresses the influence of intercultural relationships on migrants' heritage culture maintenance, though we might expect that romantic involvement with a host national loosens a migrant's ties to their heritage culture. However, greater mainstream culture adoption does not necessarily mean decreased heritage culture maintenance (Berry, 1980); indeed, it may be that romantic involvement with a host national may make one wish to hang on to one's cultural heritage even more. Due to these equally plausible scenarios, we examined the link between intercultural relationships and heritage culture maintenance on an exploratory basis only. Because heritage maintenance tends to predict psychological adjustment (Ward & Rana-Deuba, 1999), we therefore examined the predictors of psychological adjustment on an exploratory basis too.

Second, intercultural partners may differ in independence and interdependence, communication style, language, gender role expectations, and the experience of minority stress and discrimination – differences that have the potential to decrease relationship quality, yet do not (Lee et al., 2017; Uhlich et al., 2022). Instead, intercultural relationships provide an arena for self-expansion that can maintain relationship quality in the face of these other challenges (West et al., 2022). Nonetheless, few studies have taken a longitudinal, dyadic approach to understand the influence of intercultural relationships on migrants' long-term relationship quality and continuance. We therefore examined these indices of relational adjustment on an exploratory basis only. Due to the lack of precedent in the literature, we also abstained from making hypotheses for any partner effects. In sum, we predicted the following:

Hypothesis 3. Migrants to the UK who are involved in an intercultural relationship with a British person, relative to migrants involved in a monocultural relationship with a non-British person, will report (a) greater mainstream culture identification, (b) greater sociocultural adjustment, and (c) a higher likelihood of remaining in the UK.

Method

Participants

Our sample consisted of 146 romantic couples (144 mixed-gender, 2 same-gender) who were residing in the United Kingdom. Similar to Sun et al.'s (2002) approach, we used the APIMPower Program (Ackerman & Kenny, 2016) to conduct a sensitivity analysis based on an estimated medium actor effect size (partial $r = .25$), a small partner effect size (partial $r = .10$), an average correlation between the actor and partner variables of $r = .15$ (Table 11, Supplementary File), and $\alpha = .05$. These effect size estimates are consistent with evidence that partner effects tend to be smaller than actor effects (Joel et al., 2020). Our analysis indicated that 146 dyads could detect a medium actor effect size with 99% power and a small partner effect size with 41% power.

The following demographic information, collected at Time 1, revealed that male-identified participants were significantly older than female-identified participants ($M_s = 27.47$ and 25.79 , $SD_s = 6.52$ and 4.33 , respectively), $t(290) = 2.59$, $p = .010$, $d = .30$ (CI: .07, .53). 63% of participants had completed a Bachelor's degree or higher, and 38% were currently enrolled in full- or part-time school. 22% were born or raised in the UK (referred to hereafter as host nationals); this meant that 44% of couples were intercultural and 56% were monocultural. Of the 78% of participants born or raised outside the UK (referred to hereafter as migrants), 47% were from Europe, 13% from North America, 11% from East Asia, 9% from South Asia, 7% from the Middle East, 4% from Australia or New Zealand, 4% from Latin America, 3% from Africa, and 2% from various other regions. Migrants had lived for an average of 33.35 months in the UK ($SD = 33.70$) and rated their English language ability as good to excellent ($M = 3.87$, $SD = .93$).

In the total sample, 40% were cohabiting with their romantic partner, 28% were exclusively dating, 21% were married, 8% were engaged, and 3% were non-exclusively dating or "other". 90% did not have children. The average relationship length was 35.74 months ($SD = 30.65$). Additional information about the participants is available in the supplementary file.

Procedure

Participants were recruited through posting advertisements at a London university and at an online classifieds website (www.gumtree.co.uk) for major cities in all regions of the UK. The inclusion criteria stated that participants needed to be in a romantic relationship that had lasted for at least two months, both partners needed to participate, and at least one partner had migrated to the UK within the last five years (see the Supplementary File for more details about the inclusion criteria). Interested participants contacted the researchers via email; those who consented to participate, and their partners, were sent a link to the first online survey, which consisted of the Day 1 (cross-sectional) measures. Starting the following day, and every day for the next two weeks, partners were emailed a link to the daily diary measures. Each participant was paid £ 5 for completing the first questionnaire, £ 1 for completing each daily survey, and £ 1 bonus if they completed all 14 daily surveys.

Materials

All questionnaires were presented in English. Cronbach’s alpha coefficients are reported in Table 1. Unless indicated otherwise, responses to the following scales were assessed with a 5-point Likert scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). Attachment style, acculturation orientation, sociocultural adjustment, and relationship quality were measured with full versions on Day 1 and with shortened versions of previously-validated scales during the diary period (psychological adjustment was only measured during the diary period). Consistent with other diary studies, the diaries were kept short to encourage daily completion over the two-week period and to reduce participant fatigue (van Eerde & Venus, 2018). The diary items, selected for their face validity, were all strongly correlated with their cross-sectional counterparts (all $r_s > .42$, all $p_s < .001$). We reported both the cross-sectional and the diary findings to more fully capture the influence of stable, trait-like individual differences in attachment (Day 1) and the dynamic responses of the attachment system to daily social interactions (Days 2–15), consistent with research demonstrating that there is considerable attachment variability in day-to-day life (Kaurin et al., 2022). Several additional measures beyond the scope of this study were also included in the Day 1 survey and daily diary. Materials, anonymized data, and analysis scripts are available here: https://osf.io/mzf5n/?view_only=6a838cf396a148f3ae06ab5e7cdd8654.

Cross-sectional measures (Day 1)

Attachment style. The 36-item Experiences in Close Relationships – Revised Questionnaire (ECR-R; Fraley et al., 2000) measures attachment anxiety (e.g., “I’m afraid that I will lose my partner’s love”) and avoidance (e.g., “I prefer not to be too close to romantic partners) with 18 items each.

Acculturation orientation. The Vancouver Index of Acculturation (VIA; Ryder et al., 2000) consists of 10 items that measure mainstream culture orientation (e.g., “I often participate in mainstream British cultural traditions”) and 10 that measure heritage culture orientation (e.g., “It is important for me to maintain or develop the practices of my heritage culture”).

Sociocultural adjustment. The 41-item Sociocultural Adaptation Scale (SCAS; Ward & Kennedy, 1999) measures the cognitive and behavioral adjustment of migrants to a host culture. Using a 5-point Likert scale (1 = *No difficulty*, 5 = *Extreme difficulty*), participants rated the difficulty of their adjustment on items such as “Seeing things from the locals’ point of view” and “Making friends”. Ratings were reverse-scored so that higher scores indicated greater sociocultural adjustment.

Relational adjustment. The 18-item Perceived Relationship Quality Components Inventory (PRQC; Fletcher et al., 2000) assesses how much intimacy, commitment, trust, satisfaction, passion, and love participants experience in their relationship. Items were rated on a 5-point Likert scale (1 = *None* and 5 = *A great deal*), with higher scores indicating greater relational adjustment.

Cultural distance. Because we sampled a wide variety of acculturating groups, we controlled for perceived cultural distance with the UK in our analyses to ensure that effects were driven by attachment style or partner characteristics rather than cultural distance. A 14-item version of the Perceived Cultural Distance Scale (Ait Ouarasse & van de Vijver, 2004) asks participants to estimate how different their host culture is to their home culture on a number of characteristics (e.g., climate, religion, language). Items are rated on a 7-point Likert scale (1 = *Very different*, 7 = *Very similar*) that we then reverse-scored so that higher scores indicated greater cultural distance.

Demographic questions: Participants indicated their gender, age, country of birth, length of residence in the UK, current city of residence, English language ability (1 = *Poor*, 2 = *Fair*, 3 = *Good*, 4 = *Excellent*, 5 = *First language*), relationship status, length of relationship, and other demographic questions not analyzed here.

Table 1

Correlations, descriptive statistics, and Cronbach’s alpha coefficients for the cross-sectional (T1) and follow-up (T2) variables. Anxiety, avoidance, relationship quality, left UK, and breakup are reported for the total sample; cultural distance, mainstream, heritage, and sociocultural are reported for migrants only.

	1	2	3	4	5	6	7	8	9	10	11
1. Cultural distance (T1)	1.00										
2. Time in UK (T1)	0.10	1.00									
3. British partner (T1)	-0.06	0.04	1.00								
4. Anxiety (T1)	.17 *	-0.03	0.06	1.00							
5. Avoidance (T1)	0.11	-0.01	0.01	.36 **	1.00						
6. Mainstream (T1)	-.46 **	0.11	.39 **	-0.09	-0.11	1.00					
7. Heritage (T1)	-.17 **	0.11	.20 **	-0.04	-.22 **	.36 **	1.00				
8. Sociocultural (T1)	-.36 **	0.08	.19 **	-.18 **	-0.11	.49 **	-0.04	1.00			
9. Relationship quality (T1)	-.22 **	0.01	0.03	-.39 **	-.60 **	.27 **	.30 **	0.10	1.00		
10. Left UK (T2)	-.26 *	-0.19	-0.20	0.11	0.03	0.03	0.18	-0.07	0.06	1.00	
11. Breakup (T2)	0.17	-0.17	-0.07	.19 *	0.15	0.00	-0.09	-0.08	-0.15	0.02	1.00
Mean	4.84	40.11	-	2.37	2.00	3.56	3.79	3.97	4.33	-	-
SD	1.21	51.49	-	0.71	0.60	0.72	0.72	0.72	0.59	-	-
α	.92	-	-	.88	.89	.87	.86	.93	.89	-	-

Note. * $p < .05$. ** $p < .01$. British partner: 1 = Born in UK, -1 = Not born in UK. Left UK: 1 = Left, 0 = Stayed. Breakup: 1 = Broke up, 0 = Together. Time in UK is in months.

Daily diary measures (Days 2-15)

Attachment style. To reduce participant burden, we selected two items based on face validity from the ECR-R (Fraley et al., 2000). One item measured daily attachment anxiety (“Today, how much did you worry that your partner might leave you?”) and one measured attachment avoidance (“Today, how much did you feel comfortable depending on your partner?” – reversed). These items were rated on a 5-point Likert scale (1 = *Not at all*, 5 = *A great deal*) so that higher scores indicated greater anxiety or avoidance.

Acculturation orientation. Eight items were selected from the VIA (Ryder et al., 2000) based on face validity. Four items were modified to measure daily involvement with mainstream British culture and four parallel items measured heritage culture involvement (e.g., “Today, how much did you behave in ways that are typical of mainstream British culture/your heritage culture?”). Given that language proficiency – a behavioral index of acculturation – predicts psychological adjustment (Kang, 2006), we added the following two items: “Today, how much did you speak English/your native language?” Finally, we included two items that more directly measured cultural identification and the affective component of acculturation (“Today, how much did you feel like a member of mainstream British culture/your heritage culture?”). We averaged the respective items together to create separate scales measuring daily mainstream and heritage involvement.

Sociocultural adjustment. Eight representative items from the SCAS (Ward & Kennedy, 1999) were selected for the diary based on face validity. Participants were instructed to rate how much difficulty they experienced that day in several domains (e.g., seeing things from a British point of view, communicating with British people) based on the same rating scale used on Day 1.

Psychological adjustment. Psychological adjustment was operationalized as high daily subjective well-being and the absence of mental ill-health. Subjective well-being was assessed with the 5-item Satisfaction with Life Scale (SWLS; Diener et al., 1985; example item: “I am satisfied with my life”) and the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988), which consists of 10 items that measure positive affect (e.g., excited) and 10 items that measure negative affect (e.g., upset). The latter items were rated on a 5-point Likert scale (1 = *Not at all*, 5 = *A great deal*). Four items were modified from the Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995) to measure depression (e.g., “Today I felt sad”) and anxiety (e.g., “Today I found it difficult to relax”). Because these scales were sufficiently correlated, we combined them into a single composite measure of psychological adjustment by standardizing each scale and then subtracting the sum of negative affect, anxiety, and depression from the sum of satisfaction with life and positive affect for every participant each day. Similar procedures have been used in other studies to create compositive measures of well-being (e.g., Reis et al., 2000). Higher scores on this composite variable represented greater daily psychological adjustment.

Relational adjustment. Daily relationship quality was measured with the mean of six representative items from the PRQC (Fletcher et al., 2000), each tapping one of the six relationship components. Items were adapted to ask about relationship quality that day and used the same rating scale as the one used on Day 1.

Results

Data analysis plan

Analyses were based on the Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000). *Actor effects* refer to the association of the actor’s independent variables with his or her own dependent variables, whereas *partner effects* refer to the association of the partner’s independent variables with the actor’s dependent variables. We used mixed modeling in SPSS version 26 with random intercepts to conduct the cross-sectional analyses. These were based on a two-level data structure, with person-level Day 1 data nested within the dyad. The predictors entered in the first block included actor’s cultural distance, length of time living in the UK, having a British partner (1 = British, –1 = non-British, reflecting intercultural and monocultural dyads, respectively), and actor’s and partner’s anxious and avoidant attachment; the predictors entered in the second block were actor’s mainstream and heritage identification, and their interaction.¹

Next, we used mixed modeling to conduct the daily diary analyses. We tested a two-level cross model with random intercepts because both partners completed the diaries on the same days – person was nested within dyad, and person was crossed with days (Kenny et al., 2020). Based on the recommendations of Bolger and Laurenceau (2013), anxiety and avoidance were partitioned into within-person and between-person components. The within-person components were person mean-centered, such that an increase in daily anxiety or avoidance relative to one’s own 14-day mean would be associated with changes in the dependent variable; the between-person component was each person’s mean anxiety or avoidance aggregated over the 14-day diary period. Because dyads were indistinguishable, we used a two-intercept approach where partners were arbitrarily assigned to be Partner 1 or Partner 2 (Kenny et al., 2020). The daily diary models also consisted of time (i.e., a variable representing days 1–14 to control for the linear effects of time, as recommended by Bolger & Laurenceau, 2013), actor’s cultural distance and length of time lived in the UK (both grand-mean centered), having a British partner, and the within- and between-person effects of actor’s and partner’s anxiety and avoidance. For intercultural couples, only the migrant actor’s data was included for cultural distance, length of time lived in the UK, partner’s

¹ See the Supplementary File for analyses that included: (1) age, relationship length, type of relationship, and gender as covariates (Tables 6 and 7); (2) the monocultural dyads only ($N = 81$) to test the partner effects for mainstream and heritage identification, and their interaction (Tables 8 and 9); (3) the separate correlations for Person 1 (99% male) and Person 2 (100% female) for the cross-sectional and daily diary data (Tables 10 and 12, respectively); and (4) the inter-partner correlations for Person 1 and Person 2’s Time 1 cross-sectional and daily diary data (Tables 11 and 13, respectively).

nationality, and the dependent variables. Nonetheless, the British partner’s anxiety and avoidance were included as predictors for migrant actors.

Cross-sectional results

Means, standard deviations, and correlations are reported in Table 1, and the cross-sectional multilevel modeling results are reported in Table 2. Against Hypothesis 1, actor’s anxiety was not significantly associated with any of the actor’s dependent variables; however, partner’s anxiety was negatively associated with actor’s mainstream culture identification. Supporting Hypotheses 2b and 2e, actor’s avoidance was negatively associated with actor’s heritage culture identification and relational adjustment, respectively; partner’s avoidance was also negatively associated with actor’s relational adjustment. None of the attachment variables significantly predicted sociocultural adjustment. Having a British partner was positively associated with actor’s mainstream identification and sociocultural adjustment (supporting Hypotheses 3a and 3b, respectively) and with heritage identification.

In the second block, actor’s mainstream identification was positively associated with actor’s sociocultural and relational adjustment; meanwhile, actor’s heritage identification was negatively associated with actor’s sociocultural adjustment but positively associated with relational adjustment. Furthermore, the interaction of actor’s mainstream and heritage identification was a significant predictor of actor’s sociocultural adjustment but not actor’s relational adjustment. Analysis of the simple slopes revealed that actor’s mainstream identification was associated with higher sociocultural adjustment when actor’s heritage identification was high (1 SD above the mean) ($B = .95, SE = .21, p < .001$), but not when actor’s heritage identification was low (1 SD below the mean) ($B = -.03, SE = .15, p = .849$). Thus, actors who were higher in both mainstream and heritage identification reported greater sociocultural adjustment, consistent with the integration hypothesis.

Indirect Effects. The results reported in Table 2 suggested several potential indirect effects by which the attachment variables might influence adjustment through mainstream and heritage orientations. To test the indirect effects, we used the Monte Carlo Method for Assessing Mediation (MCMAM; Selig & Preacher, 2008) with 20,000 resamples. This method estimated a 95% confidence interval for the indirect effects, which were significant if they did not include zero. The predictors in these models were the same as those in Table 2. These results revealed, first, that partner’s anxiety was associated with actor’s lower mainstream identification, and in turn, with actor’s lower sociocultural adjustment [indirect effect: 95% CI (-.112, -.007)]. Second, actor’s avoidance was associated with actor’s lower heritage identification, and in turn, with actor’s lower relational adjustment [indirect effect: 95% CI (-.064, -.004)]. Next, we next found that having a British partner was associated with actor’s greater mainstream identification, and in turn, with greater sociocultural adjustment [indirect effect: 95% CI (.080, .172)]. Having a British partner was also associated with actor’s greater heritage identification, and in turn, with actor’s lower sociocultural adjustment [indirect effect: 95% CI (-.072, -.003)].

Daily Diary Results

Means, standard deviations, Cronbach’s alphas, and correlations for the diary variables (averaged across days and individuals) are reported in Table 3, and results of the multilevel analyses are reported in Table 4. These analyses revealed that on days when actors and partners were higher in anxiety (i.e., within-person), actors reported lower psychological and relational adjustment (supporting Hypotheses 1d and 1e). On days when partners were higher in anxiety, actors were lower in heritage identification and in sociocultural, psychological, and relational adjustment. Actors who were higher in anxiety aggregated across the diary period (i.e., actor’s between-person anxiety) were significantly higher in heritage identification (against Hypothesis 1b), and lower in sociocultural and psychological adjustment (supporting Hypotheses 1c and 1d). On days when actors were higher in avoidance, they were lower on all five dependent variables, supporting Hypothesis 2; on days when partners were higher in avoidance, actors reported lower heritage identification and psychological and relationship adjustment. Actors who were higher in avoidance aggregated across the diary period

Table 2
Unstandardized regression coefficients for the predictors of actor’s mainstream and heritage identification, and sociocultural and relationship adjustment, for the cross-sectional data (Day 1).

	Mainstream Identification			Heritage Identification			Sociocultural Adjustment			Relational Adjustment		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Step 1												
Person1 intercept	3.72	0.06	< .001	3.90	0.08	< .001	4.05	0.07	< .001	4.31	0.05	< .001
Person2 intercept	3.69	0.05	< .001	3.86	0.06	< .001	4.04	0.06	< .001	4.33	0.04	< .001
Actor’s cultural distance	-0.25	0.03	< .001	-0.10	0.04	0.014	-0.16	0.04	< .001	-0.06	0.03	0.026
Actor’s time in UK	0.02	0.01	0.071	0.02	0.02	0.138	0.02	0.01	0.116	0.00	0.01	0.820
Actor has British partner	0.28	0.05	< .001	0.12	0.06	0.031	0.14	0.06	0.012	0.03	0.04	0.439
Actor’s anxiety	-0.04	0.06	0.469	0.04	0.07	0.571	-0.13	0.07	0.062	-0.09	0.05	0.058
Partner’s anxiety	-0.13	0.06	0.027	-0.06	0.07	0.385	-0.06	0.07	0.415	0.00	0.05	0.957
Actor’s avoidance	-0.08	0.07	0.222	-0.28	0.08	0.001	-0.04	0.08	0.579	-0.53	0.06	< .001
Partner’s avoidance	0.12	0.07	0.082	0.10	0.08	0.238	0.06	0.08	0.468	-0.11	0.05	0.043
Step 2												
Actor’s mainstream							0.41	0.08	< .001	0.13	0.06	0.023
Actor’s heritage							-0.25	0.06	< .001	0.10	0.05	0.027
Actor’s main. × heritage							0.26	0.08	0.002	-0.09	0.06	0.136

Note. British partner: 1 = Born in UK, -1 = Not born in UK.

Table 3

Correlations, descriptive statistics, and Cronbach's alpha coefficients for diary (T1) variables. Values for the daily diary variables were aggregated across the diary period (i.e., between-person).

	1	2	3	4	5	6	7	8	9	10
1. Cultural distance (T1)	1.00									
2. Time in UK (T1)	.10 **	1.00								
3. British partner (T1)	-.05 **	.09 **	1.00							
4. Anxiety (T1)	.13 **	-.05 *	-.03 *	1.00						
5. Avoidance (T1)	.25 **	-.06 **	-.03	.31 **	1.00					
6. Mainstream (T1)	-.32 **	.30 **	.40 **	-.02	-.13 **	1.00				
7. Heritage (T1)	-.21 **	.07 **	.10 **	.11 **	-.20 **	.23 **	1.00			
8. Sociocultural (T1)	-.23 **	.14 **	.12 **	-.34 **	-.23 **	.28 **	-.01	1.00		
9. Psychological (T1)	-.17 **	0.00	.07 **	-.39 **	-.43 **	.16 **	.05 *	.45 **	1.00	
10. Relationship (T1)	-.28 **	.06 **	.05 **	-.36 **	-.71 **	.18 **	.17 **	.19 **	.51 **	1.00
Mean	4.84	-	-	1.65	2.15	2.89	2.70	4.33	-.02	3.84
SD	1.21	-	-	.77	.89	.75	.76	.57	1.88	.71
α	.92	-	-	-	-	.80	.81	.82	.73	.92

Note. * $p < .05$. ** $p < .01$. British partner: 1 = Born in UK, -1 = Not born in UK.

(i.e., actor's between-person avoidance) were significantly lower in heritage identification and in sociocultural, psychological, and relational adjustment (supporting [Hypotheses 2b, 2c, 2d, and 2e](#)). When partners were higher in avoidance aggregated across the diary period (i.e., partner's between-person avoidance), actors reported lower mainstream identification and relational adjustment. Furthermore, having a British partner was positively associated with actor's mainstream identification and with sociocultural adjustment, supporting [Hypotheses 3a and 3b](#).

Indirect effects. We next explored the indirect effects of actor's and partner's anxiety and avoidance on actor's adjustment through actor's mainstream and heritage identification. Because this would entail testing many indirect effects, increasing the likelihood of Type I errors, we limited the testing of indirect effects to within-person anxiety and avoidance only; the between-person indirect effects were largely captured by the person-level indirect effects tested in the cross-sectional data. Because actor's mainstream and heritage involvement significantly predicted actor's psychological and relational adjustment but not sociocultural adjustment ([Table 4](#), Step 2), we did not test any indirect effects of the attachment variables on sociocultural adjustment. The following tests included the same predictor variables as those reported in [Table 3](#).

We found, first, that partner's within-person anxiety was associated with actor's lower heritage identification, and in turn, with actor's lower psychological adjustment (indirect effect: 95% CI [-.019, -.0001]). Second, actor's within-person avoidance was associated with actor's lower mainstream identification, and in turn, with actor's lower psychological adjustment (indirect effect: 95% CI [-.031, -.007]) and lower relational adjustment (indirect effect: 95% CI [-.007, -.001]). Third, actor's within-person avoidance was negatively associated with actor's heritage identification, and in turn, with actor's lower psychological adjustment (indirect effect: 95% CI [-.019, -.002]) and lower relational adjustment (indirect effect: 95% CI [-.004, -.0002]). Fourth, partner's within-person avoidance was associated with actor's lower heritage identification, and in turn, with actor's lower psychological adjustment (indirect effect: 95% CI [-.025, -.007]) and lower relational adjustment (indirect effect: 95% CI [-.005, -.0004]). The indirect effects of having a British partner on actor's sociocultural adjustment through actor's mainstream or heritage identification were not significant in the daily diary data, only in the cross-sectional data.

Follow-up study: time 2

Participants

Participants were emailed for the follow-up study an average of 7 years and 5 months after they completed Part 1. The considerable interval between Times 1 and 2 allowed us to capture long-term changes in participants' lives – whether they were no longer living in the UK and/or involved with the same partner. This time frame also reflected our resource constraints in terms of time and personnel. The email at Time 2 included the original name of the study, indicated that the purpose was to assess how many of the participants were still living in the UK with the same partners, stated the initials of the partner from Time 1, and invited participants to enter a draw to win an Amazon voucher worth £ 30 for completing the follow-up survey. 95 participants consented to complete the follow-up study (33% of Time 1 sample). If only one partner completed the follow-up survey, we imputed the other partner's romantic involvement based on the one response (i.e., still involved or ended relationship).

Bonferroni-corrected t -tests found that, relative to those who did not respond to the follow-up, those who responded to the follow-up significantly differed on three Time 1 variables: they were lower in cultural distance [$M_s = 5.01$ and 4.49 , $SD_s = 1.24$ and $SD = 1.11$, respectively; $t(214) = 3.03$, $p = .003$], higher in English language ability [$M_s = 3.97$ and 4.35 , $SD_s = .97$ and $.82$, respectively; $t(277) = 3.19$, $p = .002$], and were more likely to have had a British partner at Time 1 (18% vs 34%, respectively), $\chi^2(1) = 9.13$, $p = .003$. However, they did not significantly differ in attachment orientation, cultural identification, sociocultural adjustment, or relationship adjustment.

Table 4 –
Unstandardized regression coefficients for the predictors of actor's mainstream and heritage identification, and sociocultural psychological, and relational adjustment for the daily diary data.

	Mainstream Identification			Heritage Identification			Sociocultural Adjustment			Psychological Adjustment			Relational Adjustment		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Step 1															
Person1 intercept	3.13	0.06	< .001	2.77	0.08	< .001	4.36	0.06	< .001	0.32	0.17	0.057	3.80	0.05	< .001
Person2 intercept	3.04	0.06	< .001	2.70	0.07	< .001	4.31	0.05	< .001	0.02	0.15	0.885	3.92	0.05	< .001
Time	-0.02	0.00	< .001	-0.01	0.00	0.124	0.01	0.00	< .001	0.03	0.01	< .001	0.00	0.00	0.396
Actor's cultural distance	-0.19	0.03	< .001	-0.13	0.04	0.004	-0.06	0.03	0.037	0.01	0.09	0.954	-0.05	0.03	0.111
Actor's time in UK	0.05	0.01	< .001	0.01	0.02	0.433	0.02	0.01	0.039	0.00	0.03	0.915	0.00	0.01	0.851
Actor has British partner	0.26	0.05	< .001	0.04	0.06	0.489	0.10	0.05	0.026	0.12	0.13	0.349	0.01	0.04	0.874
Actor: within anxiety	-0.02	0.02	0.182	-0.01	0.02	0.495	-0.02	0.01	0.063	-0.34	0.04	< .001	-0.08	0.02	< .001
Actor: between anxiety	0.05	0.06	0.327	0.23	0.07	0.001	-0.25	0.05	< .001	-0.72	0.15	< .001	-0.07	0.05	0.162
Partner: within anxiety	-0.01	0.02	0.622	-0.03	0.02	0.045	-0.03	0.01	0.009	-0.13	0.04	0.002	-0.05	0.02	< .001
Partner: between anxiety	0.04	0.06	0.514	0.02	0.07	0.821	0.02	0.05	0.673	-0.14	0.15	0.341	-0.06	0.05	0.217
Actor: within avoidance	-0.04	0.01	0.002	-0.04	0.02	0.015	-0.03	0.01	0.001	-0.50	0.04	< .001	-0.36	0.01	< .001
Actor: between avoidance	-0.03	0.05	0.533	-0.21	0.06	< .001	-0.10	0.04	0.029	-0.74	0.13	< .001	-0.46	0.04	< .001
Partner: within avoidance	-0.01	0.02	0.700	-0.06	0.02	< .001	0.01	0.01	0.270	-0.24	0.04	< .001	-0.12	0.02	< .001
Partner: between avoidance	-0.11	0.05	0.020	-0.02	0.06	0.713	0.02	0.04	0.704	-0.09	0.13	0.481	-0.15	0.04	< .001
Step 2															
Actor's mainstream							0.02	0.01	0.139	0.42	0.05	< .001	0.09	0.02	< .001
Actor's heritage							-0.01	0.01	0.623	0.28	0.05	< .001	0.04	0.02	0.014
Actor's main. × heritage							0.00	0.01	0.842	-0.06	0.04	.155	0.00	0.02	0.898

Note. British partner: 1 = Born in UK, -1 = Not born in UK.

Materials and procedure

Participants were asked if they were still romantically involved with the Time 1 partner whose initials were included in the invitation email (0 = still involved, 1 = broken up). Participants also indicated if they currently lived in the UK or elsewhere (0 = lived in UK, 1 = left UK). Additional information is in the supplementary file.

Results

Of the participants who completed the follow-up study, 59% were still living in the UK and 41% were living elsewhere. Of the participants still living in the UK, 70% were not born in the UK (i.e., they were migrants) and 30% were born in the UK or moved to the UK as a child and identified their heritage culture as British (i.e., they were non-migrants). 58% indicated that they were still romantically involved with the same partner from Time 1.

We next conducted logistic regression models that included all of the Time 1 cross-sectional variables as predictors of having left the UK and of breaking up with one's partner by Time 2 (see Table 5). Confirming H1f and H3c, participants who were higher in attachment anxiety and did not have a British partner at Time 1 were significantly more likely to have left the UK by Time 2. There was no support for H1g and H2g, as neither anxiety nor avoidance predicted the likelihood of breakup; unexpectedly, participants who were higher in cultural distance at Time 1 were more likely to have experienced a breakup with their partner by Time 2.

General discussion

Taken together, these results suggest that romantic relationship characteristics significantly influenced migrants' acculturation and adjustment to life in the UK. Notably, migrants who were lower in attachment anxiety and avoidance and who had a British partner reported significantly greater adjustment to their cultural transition. As such, we encourage acculturation researchers to take migrants' relationship context into account more often. Below, we describe our findings in more detail and discuss the theoretical and practical implications of these findings.

Anxiety. Inconsistent with H1a and with past findings that highly anxious individuals limit their involvement in a new mainstream culture (Polek et al., 2008, 2010), we did not find that actor's anxiety was significantly associated with mainstream culture identification in either the cross-sectional or daily diary data. However, the cross-sectional data did reveal that when *partners* were higher in anxiety, actors were lower in mainstream culture identification. Thus, highly-anxious migrants may potentially inhibit their *partner's* identification with and involvement in a new culture. Moreover, the daily diary data additionally found that on days that *partners* were higher in anxiety than usual, actors reported lower heritage identification and sociocultural, psychological, and relational adjustment. Because highly anxious individuals tend to be jealous, controlling, and clingy (Sharpsteen & Kirkpatrick, 1997), they may try to monopolize their partner's time or prevent them from meeting perceived rivals from the mainstream culture. In turn, the partners of highly anxious individuals may have fewer opportunities to cultivate their own behavioral repertoire (e.g., language ability) or make friends in the new culture, potentially inhibiting their own sociocultural and psychological adaptation. Supporting this explanation, the mediational analyses revealed that partner's anxiety was associated with actor's lower mainstream culture involvement and, in turn, with actor's lower psychological adjustment.

The cross-sectional results did not find that actor's or partner's anxiety were associated with actor's lower heritage culture identification, against H1b. However, other researchers have also failed to find an association between anxious attachment and heritage culture orientation (Polek et al., 2010; Yin et al., 2021). Unexpectedly, the diary results revealed that actors who were higher in anxiety across the diary period than others (i.e., between-person effect) were *greater* in heritage identification.² It may be that anxious individuals' need for reassurance coupled with a desire to stay within their comfort zone translates into a stronger identification with their heritage culture (Polek et al., 2008; Van Oudenhoven & Hofstra, 2006). Or perhaps when things go awry in one's romantic relationship, highly anxious migrants begin to yearn for their home culture. Being chronically worried that a romantic partner might leave them, especially in a foreign country, may motivate migrants to seek proximity with other attachment figures from the heritage culture.

Consistent with H1d and H1e, the daily diary data revealed that on days that actors were higher in anxiety than usual, they were lower in psychological and relational adjustment. Moreover, actors who were higher in anxiety across the diary period (e.g., between-person) were lower in sociocultural and psychological adjustment, consistent with H1c and H1d. Overall, our results suggest that anxious individuals may not only experience lower adjustment, but they may also inhibit their partner's adjustment. This poor adjustment may accumulate over time and weaken ties to the mainstream culture. Indeed, we found that migrants who were higher in attachment anxiety at Time 1 were less likely to have remained in the UK by Time 2. Insofar as they felt marginalized by British culture, they may have felt little sense of attachment to it or obligation to remain (Wray-Lake et al., 2008).

Avoidance. Consistent with H2b and with the findings of others (Bakker et al., 2004; Polek et al., 2008, 2010; Qu & Li, 2013; Wang & Mallinckrodt, 2006), we found that highly avoidant actors identified less strongly with their heritage culture, both in the cross-sectional data and aggregated over the diary period (between-person). The diary data also showed that on days actors were

² The difference between the cross-sectional and diary results might be attributed to (1) the greater statistical power in the diary analysis than in the cross-sectional analysis, and/or (2) the diary item measuring actor's anxiety ("Today, how much did you worry that your partner might leave you?") might be more strongly associated with heritage culture identification than the 18-item cross-sectional measure of anxiety.

Table 5
Logistic regression analyses for the follow-up study.

Time 1 variable	Left UK – Time 2			Breakup – Time 2		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Intercept	-4.81	6.07	0.428	-1.68	4.11	0.683
Cultural distance	-0.54	0.33	0.099	0.44	0.22	0.046
Length in UK	-0.02	0.01	0.145	-0.01	0.01	0.068
British partner	-1.85	0.76	0.014	-0.60	0.53	0.258
Anxiety	1.17	0.54	0.031	0.45	0.35	0.198
Avoidance	0.53	0.63	0.403	0.11	0.46	0.811
Mainstream	0.14	0.60	0.821	0.76	0.47	0.109
Heritage	0.99	0.56	0.077	0.01	0.39	0.986
Sociocultural	-0.30	0.55	0.586	-0.15	0.45	0.734
Relational quality	0.41	0.71	0.568	-0.77	0.56	0.164

Note. British partner: 1 = Born in UK, -1 = Not born in UK.

higher than average in avoidance, they were lower in heritage identification. Meanwhile, on days that *partners* reported higher avoidance than average, actors also reported lower heritage culture identification, and in turn, lower psychological and relational adjustment. For monocultural couples, partners may represent their most proximal connection with their heritage culture; when one partner is more avoidant, the other partner may feel less connected with their heritage culture, which can undermine not only relationship quality but also psychological adjustment. Moreover, the cross-sectional data suggested that highly-avoidant actors were lower in relational adjustment at least in part because of their lower heritage culture identification. Weaker heritage identification may weaken relational adjustment insofar as partners lose touch with some of the values, attitudes, and beliefs of their home culture that strengthen relationships, such as an emphasis on commitment (Marshall, 2010).

Our diary data lent further insights: on days that actors were higher in avoidance than usual, they were also lower in mainstream identification and in all three indices of adjustment. When partners were higher on average in avoidance aggregated across the diary period (between-person), actors also reported lower mainstream identification – consistent with Ferenczi and Marshall (2016) – and relational adjustment. Avoidant individuals' mistrust of others and their desire to limit intimacy may lead them to maintain distance with out-group members (i.e., people from British mainstream culture), consistent with H2a. Furthermore, on days that *partners* were higher in avoidance than usual, actors were also lower in psychological and relational adjustment. Given the stress of acculturation, a partner's avoidance – i.e., of closeness, comfort, and dependency – may exacerbate the other partner's distress, destabilize their mood, and increase unhappiness with the relationship. Replicating the findings of research with non-migrant samples (Joel et al., 2020), both attachment anxiety and avoidance appeared to be toxic for migrants' relationship quality. Feeling uncared for by an avoidant partner may especially undermine relationship quality in the midst of a cultural transition: one may look to a romantic partner as a safe haven and feel dissatisfied if the partner is unsupportive.

Another interpretation of the results is that when avoidance was low, mainstream culture involvement was high, and in turn, so was relational adjustment. Thus, migration does not inevitably impair relational quality. To the contrary, migrants' mainstream culture involvement might be considered a type of self-expansion: sharing novel experiences together – such as exploring a new culture – can increase passion, intimacy, and relationship satisfaction (Muise et al., 2019), especially when partners are low in anxiety and avoidance (Aron & Aron, 2006).

Influence of British partner. Migrants who had a British partner, compared to those without a British partner, reported greater mainstream culture involvement and sociocultural adjustment (cross-sectional and diary data) and greater maintenance of their heritage culture (cross-sectional data only). The mediational analysis of the cross-sectional data suggested that British partners may have encouraged migrants' greater involvement in the mainstream culture, thus driving their sociocultural adjustment up, but British partners may also have heightened migrants' desire to maintain their heritage culture, thus driving their sociocultural adjustment back down. Thus, while having a partner from the host culture might benefit migrants' sociocultural adjustment, it might also heighten the fear of complete assimilation and motivate migrants to maintain their heritage culture.

Nonetheless, having a British partner was not associated with migrants' psychological adjustment or romantic relationship quality at Time 1, nor with their likelihood of breaking up by Time 2. The latter results are consistent with Uhlich et al.'s (2022) finding that intercultural couples do not report lower relationship quality than monocultural couples. Furthermore, the follow-up data revealed that migrants involved with a British partner at Time 1 were less likely to have left the UK by Time 2 than were migrants not involved with a British partner. This suggests that having a British partner might have moored migrants to the UK: the partner's family, friends, job, and cultural familiarity might make them want to stay. Even if the couple had broken up between Time 1 and 2, that migrants who originally had a British partner also reported greater mainstream identification and sociocultural adjustment at Time 1 might mean that they were well-prepared for long-term living in the UK. Indeed, a sense of social connection and belongingness predicts migrants' willingness to stay in the new culture (Kilpatrick et al., 2011).

Limitations and future directions

Notwithstanding the strengths of this study, there were several limitations. First, the research design was correlational in nature, therefore limiting causal inference. Second, our samples were predominantly European: insofar as they were lower in cultural distance

than non-European migrants, they may have experienced greater mainstream identification and sociocultural adjustment, perhaps owing to greater proficiency with English or to facing less discrimination. Sampling a larger number of non-Western migrant couples would allow for a stronger test of the generalizability of the present findings. Moreover, most participants were living in the greater London area, which has greater cultural diversity compared to other regions of the UK. Sampling a greater number of migrant couples who live in parts of Britain that are less diverse may reveal a different pattern of associations than those found here. Additionally, we were remiss not to include a measure of psychological adjustment on Day 1 at Time 1; as such, we did not assess whether psychological adjustment at Time 1 predicted the likelihood of leaving the UK or breaking up by Time 2.

To further expand this line of research, future studies might examine the mechanisms by which anxiety and avoidance influence acculturation orientations. We suggested several mechanisms – e.g., mistrust of others, fear of rejection or intimacy, dysfunctional coping, poor affect regulation, negative attitudes towards out-group members, and inhibited exploration – but these should be systematically tested. For example, it could be that anxious individuals curtail their partner's involvement in the mainstream culture because of fear of rejection, whereas avoidant individuals are less involved in their heritage culture because they do not easily trust others or form intimate bonds. Further research may also examine a partner's influence in different domains of acculturation (e.g., private vs public) and in different components of acculturation (e.g., behavioural, affective, or attitudinal components). For example, it could be that a highly anxious person inhibits their partner's behavioral exploration of a new culture in public spaces but has less influence on their partner's attitude towards members of the new culture in private settings.

Implications and concluding remarks

That migrants with insecure attachment styles experienced less adaptive acculturation orientations and poorer cross-cultural adjustment raises several clinical implications. Insofar as attachment-insecure migrants are encouraged to activate a representation of an attachment figure as a secure base during therapy sessions, they may feel safer and more comfortable maintaining their heritage culture, adapting their behavior to fit in to the new culture, or reducing negative attitudes toward people in the new culture (Mikulincer & Shaver, 2022). Doing so may also increase the felt security and relational adjustment of their *partners*: for example, enhancing the felt security of avoidant individuals may lead them to behave in a warmer and more intimate manner toward their partners, whereas anxious individuals may become less controlling of their partner's exploration of the new cultural environment. Furthermore, the receiving society might take further measures to enhance migrants' security: pursuing a multicultural policy assures migrants that they are wanted, valued, and cared for in the new culture, and providing social services (e.g., housing, health care, employment) may reduce downstream stress and conflict between partners. Furthermore, our finding that migrants romantically involved with a host national experienced an easier cultural transition underscores the benefits of partner visas. To conclude, we encourage acculturation researchers, clinicians, and policy-makers to take migrants' romantic relationship context into greater account when assessing their acculturation attitudes and adjustment to the new culture.

CRedit authorship contribution statement

Marshall Tara C.: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Writing – original draft, Writing – review & editing. **Lao Chi Hong:** Formal analysis, Writing – original draft, Writing – review & editing.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.ijintrel.2024.101950](https://doi.org/10.1016/j.ijintrel.2024.101950).

References

- Ackerman, R.A., & Kenny, D.A. (2016). APIMPower: An interactive tool for actor-partner interdependence model power analysis [Computer software]. <https://robert-ackerman.shinyapps.io/apimpower/>.
- Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development*, 41(1), 49–67. <https://doi.org/10.2307/1127388>
- Ait Ouarasse, O., & van de Vijver, F. J. R. (2004). Structure and function of the perceived acculturation context of young Moroccans in the Netherlands. *International Journal of Psychology*, 39(3), 190–204. <https://doi.org/10.1080/00207590344000367>
- Aron, A., & Aron, E. N. (2006). Romantic relationships from the perspectives of the self-expansion model and attachment theory: partially overlapping circles. *Dynamics of romantic love: attachment, caregiving, and sex* (pp. 359–382). The Guilford Press.
- Aspelmeier, J. E., & Kerns, K. A. (2003). Love and school: Attachment/exploration dynamics in college. *Journal of Social and Personal Relationships*, 20(1), 5–30. <https://doi.org/10.1177/02654075030201001>

- Bakker, W., van Oudenhoven, J. P., & van der Zee, K. I. (2004). Attachment styles, personality, and Dutch emigrants' intercultural adjustment. *European Journal of Personality*, 18(5), 387–404. <https://doi.org/10.1002/per.515>
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226–244. <https://doi.org/10.1037/0022-3514.61.2.226>
- Berry, J. W. (1980). Acculturation as varieties of adaptation. *Acculturation: Theory, Models and Some New Findings*, 9, 25.
- Berry, J. W. (2006). Acculturative stress. *Handbook of Multicultural Perspectives On Stress And Coping* (pp. 287–298). Spring Publications. https://doi.org/10.1007/0-387-26238-5_12
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), 491–511. <https://doi.org/10.1177/019791838702100303>
- Berry, J. W., Phinney, A. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology*, 55(3), 303–332. <https://doi.org/10.1111/j.1464-0597.2006.00256.x>
- Bierwiazczek, K., & Kunst, J. R. (2021). Revisiting the integration hypothesis: Correlational and longitudinal meta-analyses demonstrate the limited role of acculturation for cross-cultural adaptation. *Psychological Science*, 32(9), 1476–1493. <https://doi.org/10.1177/09567976211006432>
- Bolger, N., & Laurenceau, J.-P. (2013). *Intensive Longitudinal Methods: an Introduction to Diary and Experience Sampling Research*. Guilford Press.
- Bowlby, J. (1973). *Attachment and loss. Volume II. Separation, anxiety and anger*. <https://pesquisa.bvsalud.org/portal/resource/pt/psa-52619>
- Campbell, L., & Marshall, T. (2011). Anxious attachment and relationship processes: An interactionist perspective. *Journal of Personality*, 79(6), 1219–1250. <https://doi.org/10.1111/j.1467-6494.2011.00723.x>
- Carnelley, K. B., & Boag, E. M. (2019). Attachment and prejudice. *Current Opinion in Psychology*, 25, 110–114. <https://doi.org/10.1016/j.copsyc.2018.04.003>
- Clear, S. J., Gardner, A. A., Webb, H. J., & Zimmer-Gembeck, M. J. (2020). Common and distinct correlates of depression, anxiety, and aggression: Attachment and emotion regulation of sadness and anger. *Journal of Adult Development*, 27(3), 181–191. <https://doi.org/10.1007/s10804-019-09333-0>
- Crisp, R. J., Farrow, C. V., Rosenthal, H. E. S., Walsh, J., Blissett, J., & Penn, N. M. K. (2009). Interpersonal attachment predicts identification with groups. *Journal of Experimental Social Psychology*, 45(1), 115–122. <https://doi.org/10.1016/j.jesp.2008.09.006>
- Cruz, R. A., Gonzales, N. A., Corona, M., King, K. M., Cauce, A. M., Robins, R. W., & Conger, R. D. (2014). Cultural dynamics and marital relationship quality in Mexican-origin families. *Journal of Family Psychology*, 28(6), 844–854.
- Debrot, A., Stellar, J. E., MacDonald, G., Keltner, D., & Impett, E. A. (2021). Is touch in romantic relationships universally beneficial for psychological well-being? The role of attachment avoidance. *Personality and Social Psychology Bulletin*, 47(10), 1495–1509. <https://doi.org/10.1177/0146167220977709>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Dooley, M. K., Sweeny, K., Howell, J. L., & Reynolds, C. A. (2018). Perceptions of romantic partners' responsiveness during a period of stressful uncertainty. *Journal of Personality and Social Psychology*, 115, 677–687. <https://doi.org/10.1037/pspi0000134>
- Dugan, K.A., Fraley, R.C., Gillath, O., & Deboeck, P.R. (2023). Testing the canalization hypothesis of attachment theory: Examining within-subject variation in attachment security. *Journal of Personality and Social Psychology*. Advance online publication. <https://doi.org/10.1037/pspp0000488>.
- Ferenczi, N., & Marshall, T. C. (2013). Exploring attachment to the “homeland” and its association with heritage culture identification. *PLOS ONE*, 8(1), Article e53872. <https://doi.org/10.1371/journal.pone.0053872>
- Ferenczi, N., & Marshall, T. C. (2016). Meeting the expectations of your heritage culture: Links between attachment orientations, intragroup marginalization and psychological adjustment. *Journal of Social and Personal Relationships*, 33(1), 101–121. <https://doi.org/10.1177/0265407514562565>
- Fletcher, G. J. O., Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26(3), 340–354. <https://doi.org/10.1177/0146167200265007>
- Flores, E., Tschann, J. M., VanOss Marin, B., & Pantoja, P. (2004). Marital conflict and acculturation among Mexican American husbands and wives. *Cultural Diversity and Ethnic Minority Psychology*, 10, 39–52. <https://doi.org/10.1037/1099-9809.10.1.39>
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350–365. <https://doi.org/10.1037/0022-3514.78.2.350>
- Geeraert, N., Demes, K. A., & Ward, C. (2021). Sojourner expectations: Are they met and does it matter if they're not? *International Journal of Intercultural Relations*, 84, 27–40. <https://doi.org/10.1016/j.ijintrel.2021.06.004>
- Gouin, J.-P., & MacNeil, S. (2019). Attachment style and changes in systemic inflammation following migration to a new country among international students. *Attachment & Human Development*, 21(1), 38–56. <https://doi.org/10.1080/14616734.2018.1541515>
- Green, J. D., & Campbell, W. K. (2000). Attachment and exploration in adults: Chronic and contextual accessibility. *Personality and Social Psychology Bulletin*, 26(4), 452–461. <https://doi.org/10.1177/0146167200266004>
- Haak, E. A., Keller, P. S., & DeWall, C. N. (2017). Daily variations in attachment anxiety and avoidance: A density distributions approach. *Journal of Research in Personality*, 69, 218–224. <https://doi.org/10.1016/j.jrp.2016.08.002>
- Home Office. (2022). *Summary of latest statistics*. <https://www.gov.uk/government/statistics/immigration-statistics-year-ending-june-2022/summary-of-latest-statistics>.
- Incollongo Rodriguez, A. C., Polcari, J. J., Nephew, B. C., Harris, R., Zhang, C., Murgatroyd, C., & Santos, H. P. (2022). Acculturative stress, telomere length, and postpartum depression in Latinx mothers. *Journal of Psychiatric Research*, 147, 301–306. <https://doi.org/10.1016/j.jpsychires.2022.01.063>
- Joel, S., Eastwick, P. W., Allison, C. J., Arriaga, X. B., Baker, Z. G., Bar-Kalifa, E., Bergeron, S., Birnbaum, G. E., Brock, R. L., Brumbaugh, C. C., Carmichael, C. L., Chen, S., Clarke, J., Cobb, R. J., Coolsen, M. K., Davis, J., de Jong, D. C., Debrot, A., DeHaas, E. C., ... Wolf, S. (2020). Machine learning uncovers the most robust self-report predictors of relationship quality across 43 longitudinal couples studies. *Proceedings of the National Academy of Sciences*, 117(32), 19061–19071. <https://doi.org/10.1073/pnas.1917036117>
- Kang, S.-M. (2006). Measurement of acculturation, social formats, and language competence: Their implications for adjustment. *Journal of Cross-Cultural Psychology*, 37(6), 669–693. <https://doi.org/10.1177/0022022106292077>
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. *Handbook of Research Methods In Social And Personality Psychology* (pp. 451–477). Cambridge University Press.
- Kaurin, A., Pilkonis, P. A., & Wright, A. G. C. (2022). Attachment manifestations in daily interpersonal interactions. *Affective Science*, 3(3), 546–558. <https://doi.org/10.1007/s42761-022-00117-6>
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2020). *Dyadic data analysis*. Guilford Publications.
- Kilpatrick, S., Johns, S., Vitartas, P., & Homisan, M. (2011). Mobile skilled workers: Making the most of an untapped rural community resource. *Journal of Rural Studies*, 27(2), 181–190. <https://doi.org/10.1016/j.jrurstud.2011.01.003>
- Lee, S., Balkin, R. S., & Fernandez, M. A. (2017). Asian intercultural marriage couples in the United States: A study in acculturation and personality traits. *The Family Journal*, 25(2), 164–169. <https://doi.org/10.1177/1066480717697951>
- Lefringhausen, K., Marshall, T.C., Ferenczi, N., Zagefka, H., & Kunst, J.R. (2022). Majority members' acculturation: How proximal-acculturation relates to expectations of immigrants and intergroup ideologies over time. *Group Processes & Intergroup Relations*. <https://journals.sagepub.com/doi/full/10.1177/13684302221096324>.
- Li, M., Reese, R. J., Ma, X., & Love, K. (2021). The role of adult attachment in international students' acculturation process. *International Journal of Intercultural Relations*, 81, 29–41. <https://doi.org/10.1016/j.ijintrel.2020.12.008>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the depression anxiety stress scales (DASS) with the beck depression and anxiety inventories. *Behaviour Research and Therapy*, 33(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Marshall, T. C. (2010). Love at the cultural crossroads: Intimacy and commitment in Chinese Canadian relationships. *Personal Relationships*, 17(3), 391–411. <https://doi.org/10.1111/j.1475-6811.2010.01280.x>

- Martin, A. M., Paetzold, R. L., & Rholes, W. S. (2010). Adult attachment and exploration: Linking attachment style to motivation and perceptions of support in adult exploration. *Basic and Applied Social Psychology*, 32(2), 196–205. <https://doi.org/10.1080/01973531003738452>
- Migration Observatory. (2022). *EU Migration to and from the UK*. Migration Observatory. <https://migrationobservatory.ox.ac.uk/resources/briefings/eu-migration-to-and-from-the-uk/>.
- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to outgroups. *Journal of Personality and Social Psychology*, 81, 97–115. <https://doi.org/10.1037/0022-3514.81.1.97>
- Mikulincer, M., & Shaver, P. R. (2019). Attachment orientations and emotion regulation. *Current Opinion in Psychology*, 25, 6–10. <https://doi.org/10.1016/j.copsyc.2018.02.006>
- Mikulincer, M., & Shaver, P. R. (2022). Enhancing the “broaden-and-build” cycle of attachment security as a means of overcoming prejudice, discrimination, and racism. *Attachment & Human Development*, 24(3), 260–273. <https://doi.org/10.1080/14616734.2021.1976921>
- Muise, A., Harasymchuk, C., Day, L. C., Bacev-Giles, C., Gere, J., & Impett, E. A. (2019). Broadening your horizons: Self-expanding activities promote desire and satisfaction in established romantic relationships. *Journal of Personality and Social Psychology*, 116, 237–258. <https://doi.org/10.1037/pspi0000148>
- Nguyen, A.-M. D., & Benet-Martinez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology*, 44(1), 122–159. <https://doi.org/10.1177/0022022111435097>
- Orengo-Aguayo, R.E. (2015). Mexican american and other hispanic couples' relationship dynamics: A review to inform interventions aimed at promoting healthy relationships. *Marriage & Family Review*. <https://www.tandfonline.com/doi/full/10.1080/01494929.2015.1068253>.
- Overall, N. C., Chang, V. T., Pietromonaco, P. R., Low, R. S. T., & Henderson, A. M. E. (2022). Partners' attachment insecurity and stress predict poorer relationship functioning during COVID-19 quarantines. *Social Psychological and Personality Science*, 13(1), 285–298. <https://doi.org/10.1177/1948550621992973>
- Pandya, S. P. (2021). Online spiritual counseling mitigates immigration stress and promotes better marital adjustment of south asian young dual-earner couples who emigrate to western countries. *Contemporary Family Therapy*, 43(1), 35–53. <https://doi.org/10.1007/s10591-020-09547-5>
- Pietromonaco, P. R., & Overall, N. C. (2021). Applying relationship science to evaluate how the COVID-19 pandemic may impact couples' relationships. *American Psychologist*, 76, 438–450. <https://doi.org/10.1037/amp0000714>
- 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(5), 919–928. <https://doi.org/10.1080/00207590701484835>
- Polek, E., Wöhrle, J., & Pieter van Oudenhoven, J. (2010). The role of attachment styles, perceived discrimination, and cultural distance in adjustment of German and Eastern European immigrants in the Netherlands. *Cross-Cultural Research*, 44(1), 60–88. <https://doi.org/10.1177/1069397109352779>
- Ponciano, C., Wang, C. D. C., & Jin, L. (2022). Attachment, acculturative stress, and mental health of Mexican immigrants. *Counselling Psychology Quarterly*, 35(2), 381–396. <https://doi.org/10.1080/09515070.2020.1813688>
- Qu, X., & Li, L. (2013). Attachment, acculturation and GHQ-30 of Chinese students in Japan. *Psychological Studies*, 58(3), 216–224. <https://doi.org/10.1007/s12646-013-0192-z>
- Rapaport, M., Doucerain, M. M., & Gouin, J.-P. (2021). Come abroad with me: The role of partner characteristics and couple acculturation gaps on individual psychological adjustment. *Journal of Ethnic and Migration Studies*, 00(0), 1–23. <https://doi.org/10.1080/1369183X.2021.2007761>
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38(1), 149–152.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26(4), 419–435.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology*, 79, 49–65. <https://doi.org/10.1037/0022-3514.79.1.49>
- Safdar, S. F., & Lay, C. H. (2003). The relations of immigrant-specific and immigrant-nonspecific daily hassles to distress controlling for psychological adjustment and cultural competence. *Journal of Applied Social Psychology*, 33(2), 299–320. <https://doi.org/10.1111/j.1559-1816.2003.tb01898.x>
- Sam, D. L., & Berry, J. W. (2010). Acculturation: When individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5(4), 472–481. <https://doi.org/10.1177/1745691610373075>
- Santos, S. J., Bohon, L. M., & Sánchez-Sosa, J. J. (1998). Childhood family relationships, marital and work conflict, and mental health distress in Mexican immigrants. *Journal of Community Psychology*, 26(5), 491–508. [https://doi.org/10.1002/\(SICI\)1520-6629\(199809\)26:5<491::AID-JCOP7>3.0.CO;2-U](https://doi.org/10.1002/(SICI)1520-6629(199809)26:5<491::AID-JCOP7>3.0.CO;2-U)
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, 14(4), 449–464. [https://doi.org/10.1016/0147-1767\(90\)90030-Z](https://doi.org/10.1016/0147-1767(90)90030-Z)
- Selig, J.P., & Preacher, K.J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects. <http://www.quantpsy.org/medmc/medmc.htm>.
- Sharpsteen, D. J., & Kirkpatrick, L. A. (1997). Romantic jealousy and adult romantic attachment. *Journal of Personality and Social Psychology*, 72, 627–640. <https://doi.org/10.1037/0022-3514.72.3.627>
- Simpson, J. A., Rholes, W. S., Eller, J., & Paetzold, R. L. (2021). Major principles of attachment theory. *Social Psychology: Handbook of Basic Principles* (third ed...), Guilford Press.
- Smith, E. R., Murphy, J., & Coats, S. (1999). Attachment to groups: Theory and management. *Journal of Personality and Social Psychology*, 77, 94–110. <https://doi.org/10.1037/0022-3514.77.1.94>
- Sochos, A., & Diniz, M. (2012). The role of attachment in immigrant sociocultural adaptation and psychological distress. *Journal of Community & Applied Social Psychology*, 22(1), 75–91. <https://doi.org/10.1002/casp.1102>
- Sommerville, W., & Walsh, W. (2021, August 18). *United Kingdom's Decades-Long Immigration Shift Interrupted by Brexit and the Pandemic*. Migrationpolicy.Org. <https://www.migrationpolicy.org/article/united-kingdom-shift-immigration-interrupted-brexit-pandemic>
- Sun, Q., Geeraert, N., & Lamarche, V.M. (2022). Home is where the heart is: Implications of dyadic acculturation for migrant couples' personal and relational well-being. *Personality and Social Psychology Bulletin*, 01461672221139083. <https://doi.org/10.1177/01461672221139083>
- Sutton, T. E. (2019). Review of attachment theory: Familial predictors, continuity and change, and intrapersonal and relational outcomes. *Marriage & Family Review*, 55(1), 1–22. <https://doi.org/10.1080/01494929.2018.1458001>
- Tropp, L. (2021). Crossing to safety: Attachment processes in intergroup contact. *Journal of Social Issues*, 77(1), 86–104. <https://doi.org/10.1111/josi.12426>
- Uhlich, M., Luginbuehl, T., & Schoebi, D. (2022). Cultural diversity within couples: Risk or chance? A meta-analytic review of relationship satisfaction. *Personal Relationships*, 29(1), 120–145. <https://doi.org/10.1111/per.12405>
- van Erde, W., & Venus, M. (2018). A daily diary study on sleep quality and procrastination at work: The moderating role of trait self-control. *Frontiers in Psychology*, 9. <https://www.frontiersin.org/articles/10.3389/fpsyg.2018.02029>
- Van Oudenhoven, J. P., & Hofstra, J. (2006). Personal reactions to ‘strange’ situations: Attachment styles and acculturation attitudes of immigrants and majority members. *International Journal of Intercultural Relations*, 30(6), 783–798. <https://doi.org/10.1016/j.ijintrel.2006.05.005>
- Wahba, J. (2021). Who benefits from return migration to developing countries? *IZA World of Labor*. <https://doi.org/10.15185/izawol.123.v2>
- Wang, C. D., Carbajal, I., Barajas-Munoz, I. A., Julio, K., Gomez, A., Trummer, M., & Scalise, D. (2022). Adult attachment, acculturation, acculturative stress, and psychological distress of first-generation latinx immigrants. *Counselling Psychology Quarterly*, 35(3), 634–651. <https://doi.org/10.1080/09515070.2021.1933910>
- Wang, C.-C. D., & Mallinckrodt, B. (2006). Acculturation, attachment, and psychosocial adjustment of Chinese/Taiwanese international students. *Journal of Counseling Psychology*, 53, 422–433. <https://doi.org/10.1037/0022-0167.53.4.422>
- Wang-Schweig, M., & Miller, B. A. (2021). Examining the interdependence of parent-adolescent acculturation gaps on acculturation-based conflict: Using the actor-partner interdependence model. *Journal of Youth and Adolescence*, 50(2), 367–377. <https://doi.org/10.1007/s10964-018-0948-9>
- Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations*, 18(3), 329–343. [https://doi.org/10.1016/0147-1767\(94\)90036-1](https://doi.org/10.1016/0147-1767(94)90036-1)
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23(4), 659–677. [https://doi.org/10.1016/S0147-1767\(99\)00014-0](https://doi.org/10.1016/S0147-1767(99)00014-0)

- Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology*, 30(4), 422–442. <https://doi.org/10.1177/0022022199030004003>
- Ward, C., Szabó, Á., Schwartz, S. J., & Meca, A. (2021). Acculturative stress and cultural identity styles as predictors of psychosocial functioning in Hispanic Americans. *International Journal of Intercultural Relations*, 80, 274–284. <https://doi.org/10.1016/j.ijintrel.2020.12.002>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- West, A.L., Naeimi, H., Di Bartolomeo, A.A., Yampolsky, M., & Muise, A. (2022). Growing together through our cultural differences: Self-expansion in intercultural romantic relationships. *Personality and Social Psychology Bulletin*. https://journals.sagepub.com/doi/full/10.1177/01461672221121508?casa_token=unTc63NTLFgAAAAA%3AtKa5abVCdoVsyfH_2JtM-ce8tNN1v3ztBmOMyppDX7AAvI0Acvy4zUIy2fMsL5t6yxgBaRINMKf3Pw
- Wilson, J., Ward, C., Fetvadjev, V. H., & Bethel, A. (2017). Measuring cultural competencies: The development and validation of a revised measure of sociocultural adaptation. *Journal of Cross-Cultural Psychology*, 48(10), 1475–1506. <https://doi.org/10.1177/0022022117732721>
- Wray-Lake, L., Syvertsen, A. K., & Flanagan, C. A. (2008). Contested citizenship and social exclusion: Adolescent Arab American immigrants' views of the social contract. *Applied Developmental Science*, 12(2), 84–92. <https://doi.org/10.1080/10888690801997085>
- Yin, M., Aoki, K., Liao, K. Y.-H., & Xu, H. (2021). An exploration on the attachment, acculturation, and psychosocial adjustment of Chinese international students in Japan. Article 1. *Journal of International Students*, 11(1). <https://doi.org/10.32674/jis.v11i1.1454>