Who moved with you? The companionship of significant others reduces movers’ motivation to make new friends

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This research investigated how residential moves with versus without the companionship of significant others would affect people’s motivation to make new friends. Studies 1a and 1b showed that the companionship of significant others predicted fewer new friends among university students who moved within the same country (Study 1a) and to a different country (Study 1b), suggesting that the companionship of significant others was associated with a lower level of motivation to make new friends. In Study 2, the results of an experiment demonstrated that the companionship of a significant other reduced movers’ motivation to make new friends, and this was explained by positive affect but not negative affect. Specifically, the companionship of a significant other, compared with the companionship of an acquaintance or no companionship, led to stronger positive affect, which, in turn, reduced motivation to make new friends. Taken together, these findings call for more nuanced theory on the influence of residential mobility on well-being and social networks.

Keywords: companionship, friendship, negative affect, positive affect, residential mobility, social network.

Moving has become an increasingly common experience for people in the contemporary world (Magdol & Bessel, 2003). The global population of immigrants has been escalating dramatically in the past two decades and has reached more than 250 million in 2017 (United Nations, 2017). In 2015, over 4 million students worldwide were studying abroad to pursue academic credits (UNESCO, 2021). This global trend of increasing mobility has stimulated much research in residential mobility (Gustafson, 2009; L. M. W. Li, 2017; Magdol, 2000), which is defined by an individual’s frequency of moving (Oishi, 2010). Much research has demonstrated that residential mobility influences people’s sense of self, social relationships, and well-being (see Oishi, 2010 for an overview).

Notably, previous studies on residential mobility mostly tested the mere effect of moving itself, relying on comparisons between moving and not moving or studying the consequences of frequency/times of moving, without considering the intricate differences among various types of moves that could happen in people’s daily lives (e.g., moving alone vs. moving with significant others). As a result, this may limit our understanding of the influence of moving. Recognizing this limitation, there is a call to compare the effects of different types of moves (Oishi et al., 2013; Talhelm & Oishi, 2014). In response to this call, this research compared the influences of moves with versus without the companionship of significant others on people’s motivation to expand their social networks.

Movers’ motivation to expand social networks

The characteristics of movers’ social networks are vital for understanding the theoretical development and the impact of residential mobility (Curley, 2009). According to previous research on residential mobility, one of the pivotal characteristics of movers is their strong motivation to expand social networks. Seder and Oishi (2008) found that people with high residential mobility (i.e., people who have moved more frequently) had a larger social network than people with low residential mobility. Oishi et al. (2013) further demonstrated that high residential mobility (vs. low residential mobility) induced a greater level of loneliness and sadness, which, in turn, led to stronger motivation to expand social networks. However, these prior examinations did not consider different types of residential moves (e.g., moving alone vs. moving with significant others), which ignored the possibility that different types of moves may have different effects on movers’ social network processing (Magdol & Bessel, 2003).
In fact, some contradictory findings were observed in the field of acculturation and cross-cultural adaptation. It was found that some international students and immigrants had a small social network or refrained from establishing ties in the host society, indicating that movers’ motivation for making new friends could be constrained by some factors (Doucerain et al., 2015; Meier & Daniels, 2013; Smith & Khawaja, 2011). These studies revealed that several individual characteristics, such as personality (Ward et al., 2004), perceived discrimination (Oxman-Martinez et al., 2012), and language skills (Lou & Noels, 2020), explained international students’ and migrants’ motivation, or lack thereof, to expand their social networks.

In this study, we proposed that in addition to personal characteristics, ecological assets also shape movers’ motivation to make new friends. Ecological assets are resources in one’s social environment (e.g., family, school, community), including supportive relationships, engagement in collective activity with others, physical and institutional resources, and so on (Theokas & Lerner, 2006). Evidence exists to indicate that ecological assets in various contexts, such as family, community, and school, have a significant influence on individuals’ life outcomes, including academic success, social responsibility, and resilience (Theokas & Lerner, 2006; Wray-Lake et al., 2016). Moreover, previous research suggests that social support seeking is an essential element that undergirds movers’ motivation to make new friends (Oishi et al., 2013). Therefore, ecological assets, which are closely related to the level of social support in one’s social environment, may also affect movers’ motivation to make new friends. In other words, movers varying in ecological assets may have different degrees of motivation to expand their social networks.

The companionship of significant others and movers’ motivation to make new friends

In this research, we focus on the companionship of significant others, as an indicator of the accessibility to the mover of people who are important to them (e.g., romantic partner, friends, and family) and are available to provide proximity-contingent social support in the new environment. We propose that movers with the companionship of significant others will have weaker motivation to make new friends compared to those without such companionship. We further propose that weaker negative affect and stronger positive affect would mediate the effect of the companionship of significant others on motivation to make new friends. The rationale of the hypotheses is elaborated as follows.

Some people move alone, leaving their significant others in their old place, some people move together with their significant others (Pittman & Bowen, 1994; Wood et al., 1993), and some people move to unite with their family or romantic partners (Hiller & McCaig, 2007; Krapf, 2018). With or without the companionship of significant others, moving is a stressful life event (Falconier et al., 2016; Smith & Khawaja, 2011). Multiple changes may be associated with moving, such as a new lifestyle, language, and school, and/or changes in financial and social status. These may be considerable challenges for every mover, and movers would be in great need of social capital that can provide instrumental and emotional support in this relatively vulnerable state. However, in facing those challenges of establishing a new life in the new place, movers with versus without significant others’ companionship may adopt different coping strategies, manifested by varying degrees of motivation to establish new social ties.

For the movers without the companionship of significant others (i.e., who move alone and do not have any significant other in the new place), their social experiences would be hugely disrupted as their previous social networks are breached by the residential move, becoming unavailable to them. These people are likely to feel high levels of loneliness and sadness associated with moving while facing completely new social environments. Supporting the above notion, it is well-established that separation from family and friends is an important antecedent of loneliness and sadness (Perlman & Peplau, 1981). Furthermore, many studies have demonstrated that loneliness is an aversive signal that makes people sensitive to the pain of social isolation and motivates them to make new social connections to survive and thrive (Cacioppo et al., 2014; Masi et al., 2011). To cope with the loneliness and sadness, the movers without the companionship of significant others may be highly motivated to establish new social ties. Supporting this theorizing, Magdol and Bessel (2003) found that people who lived farther away from their kin had more intensive social contact with their non-kin social ties, suggesting that friends in the new place could serve as substitutes for one’s significant others when they are not available.

In contrast, the movers with the companionship of significant others (i.e., who move together with significant others or have significant others near them in their destination of residential move) may have entirely different social experiences. For these movers, their former social network is less disrupted compared to the movers without such companionship, as at least their social ties with their significant others remain. Those who moved for a reunion with their family may actually re-establish social ties with their significant others back at home (Choldin, 1973). An extensive literature on chain migration (i.e., some family members migrate first and are later joined by other family members) shows that the pioneer migrants can provide various
essential support to the new immigrants such as providing food, accommodation, and information, being a companion for recreation, and so on (Boyd, 1989; Choldin, 1973; Haug, 2008). Thus, when significant others are proximal and available, they become an important source of social support (Aroian et al., 1996; Tingvold et al., 2012). In fact, kin are the most vital and desirable source of social support for new immigrants (Choldin, 1973). Social connection with and social support from significant others are found to be important buffers against loneliness (Adamczyk, 2016; Bondevik & Skogstad, 1998). Therefore, movers with the companionship of significant others may experience less loneliness and sadness. Consistently, Chinese immigrants with physical access to immediate family members (i.e., distance to the immediate family within 50 miles) experienced less immigration stress (Y. Li et al., 2015). Similarly, refugee minors with the companionship of their parents had fewer mental health problems than those without such companionship (Derluyn et al., 2008).

Moreover, the companionship of significant others may give rise to positive affect in the movers. Supportive relationships and perceived social support are robust predictors of individuals’ happiness (Chan & Lee, 2006; Zhu et al., 2013). With significant others to satisfy their needs for social support, the movers with the companionship of significant others may experience greater positive affect as compared with those without companionship. Consistently, it was found that married couples who moved together were happier than those who were separated from their partners (Nowok et al., 2013). Moreover, a study on internal migrants within China found that people who migrated with their children were happier than those who migrated while leaving their children in their hometowns (Wang et al., 2019). Another study on migrant workers in China revealed that the number of family members in the resident city (i.e., the destination of migration) was positively related to their satisfaction with the residence (Tao et al., 2014).

As introduced earlier, loneliness-sadness has been identified as an important drive for motivation to make new friends (Cacioppo et al., 2014; Masi et al., 2011). With less loneliness and sadness and yet stronger positive affect, movers with significant others’ companionship are likely to find an enlarged social network to be less important and less necessary and thus become less motivated to make new friends. Taken together, the companionship of significant others may decrease negative affect and increase positive affect in the movers, which then reduce movers’ motivation to make new friends.

**Overview of the studies**

Aiming at extending the research of Oishi et al. (2013) and investigating the relation between residential move and motivation to make new friends in a more fine-grained way, the current research investigated how moves with versus without the companionship of significant others would affect movers’ motivation to make new friends. We hypothesized that the companionship of significant others would be associated with weaker motivation to make new friends and this association would be explained by weaker negative affect and stronger positive affect associated with the companionship of significant others. Three studies were conducted to test the hypotheses. Presuming that weaker motivation to make new friends could be reflected by a smaller friendship network in the new environment, we tested whether the companionship of significant others would predict fewer new friends among university students who moved within the same country in Study 1a and among those who moved to a different country in Study 1b. In Study 2, we conducted an experiment to systematically test whether the companionship of a significant other, in comparison to the companionship of an acquaintance and no companionship, would lead to weaker motivation to make new friends. Furthermore, we tested the mediating roles of positive affect and negative affect.

**Study 1a**

In Study 1a, we expected that the companionship of significant others would be associated with weaker motivation to make new friends, reflected by a smaller number of new friends in general. We tested our hypothesis among people who moved within the same country, specifically domestic students who transited from high school to university. Transition to university has been studied as a context of residential mobility (Cicognani et al., 2011). In the transition to university, students leave their homes or the dormitories in high school to the dormitories at university. For these students, established routines and social networks in high school have been broken, and they need to develop new social ties at the university where there are numerous stressors and challenges (Denovan & Macaskill, 2013).

In addition, we also explored whether and how the companionship of significant others would influence the ratio of friends from the same place of origin (i.e., friends moving from the same place as the mover). Here, the same place of origin is considered in a relative sense and could range in different scales from the same town to the same country. Previous research found that international students’ and migrants’ social networks in the destination country were dominated by co-national friends (Neri & Ville, 2008; Ryan, 2015). Furthermore, co-national friends were found to have “bonding” effects, helping immigrants to maintain their cultural identity and sense of belonging, while international
friends were found to exert “bridging” effects, facilitating integration into the destination country (Ryan, 2011, 2015). The significant others (e.g., family, friends) accompanying the mover, who are strong ties in one’s social network in the place of origin, may be more likely to substitute for the role of the friends from the same place of origin and make those friends less necessary for the mover. Therefore, we expected that movers with the companionship of significant others will have a lower ratio of new friends from the same place of origin. Specifically, in Study 1a, we measured the number of new friends the students had made since moving to the university, differentiating friends from the same province as the students versus friends from different provinces, and then computed the ratio of friends from the same place of origin (i.e., the same province).

**Method**

**Participants**

We used G*Power (Faul et al., 2009) to compute the required sample size to detect a statistically significant small-to-medium effect ($f^2 = 0.10$) in a linear regression model with one predictor. We found that 81 participants would achieve 80% power. We conservatively oversampled and recruited 104 domestic students at a large public university in Guangdong Province in China. Students in this university come from regions all over the country and they all live on campus in dormitories. One participant was excluded from analysis because the participant was not a currently enrolled student. The final sample included 103 students (68 females, 66.7%; mean age = 19.23, $SD = 1.89$). The students were from different grades (53 first-year, 24 second-year, 14 third-year, 6 fourth-year, and 6 Master’s students). Participants were recruited through online platforms on campus. They all provided consent to participate in this study and finished an online survey. Each participant received 5 RMB as remuneration.

**Ethical Approval**

This project was approved by the departmental ethics review committee of the Department of Psychology, Sun Yat-sen University.

**Measures**

**The companionship of significant others.** Participants were asked, “When you first came to study at the university, did you have any family member living in Guangdong (the province where the university is located)?” Participants indicated their answers by choosing “yes” or “no.” Having family members living in the same province as oneself would mean that the family members are more easily accessible and reachable for instrumental support or emotional support. Among the participants, 78 students (75.7%) had family members living in Guangdong.

**The number of new friends since university.** We asked participants to write down the number of new friends they had made since they started to study at the university by specifying (a) the number of new friends originating from the same province as the participant and (b) the number of new friends from different provinces compared to them. We summed up (a) and (b) as their total number of new friends. In this study, the total number of new friends ranged from 2 to 200, $M = 30.01$, $SD = 33.33$. As the total number of new friends was highly skewed (Skewness = 2.47, Kurtosis = 8.05), we conducted log transformation, and the transformed score no longer deviated from a normal distribution (Skewness = 0.24, Kurtosis = −0.67). Hence, the log-transformed score was used in the regression analysis reported below. Furthermore, we computed the ratio of new friends from the same province of origin: (a)/(a + b). A higher score represents a higher ratio of new friends from the same province of origin. The ratio of new friends from the same place of origin ranged from 0 to 1, $M = 0.40$, $SD = 0.24$, and did not deviate from a normal distribution (Skewness = 0.25, Kurtosis = −0.52).

**Demographic information.** Finally, participants answered questions regarding demographic information, including gender, age, and grade.

**Results**

Figure 1a shows the results of the number of new friends among the students with versus without the companionship of significant others in Study 1a. To test whether the companionship of significant others predicted fewer new friends among the participants, we regressed the total number of new friends on the companionship of significant others ($1 = with the companionship of significant others, 0 = without the companionship of significant others$). The results showed that the companionship of significant others predicted fewer new friends, $b = −0.23, SE = 0.11$, $t = −2.16, p = .033$, 95% confidence interval (CI) = $[−0.45, −0.02]$. Furthermore, we analysed whether the companionship of significant others predicted the ratio of new friends from the same province as the participants. Unexpectedly, the results showed that the companionship of significant others was positively associated with the ratio of new friends from the same province, $b = 0.29, SE = 0.06$, $t = 5.36, p < .001$, 95% CI = [0.19, 0.40]. The
aforementioned regression results remained similar when we controlled for participants’ gender, age, and grade.

Discussion

In Study 1a, we found that the domestic students who had family members available for companionship made fewer new friends after the transition to university, which supported our hypothesis that the companionship of significant others would be associated with weaker motivation to make new friends in the new environment. However, contrary to our expectation, the companionship of significant others predicted a higher ratio of new friends from the same province of origin. We speculated that this unexpected result was because a great proportion of the students in Study 1a were from Guangdong where the university is located, therefore more co-province potential friends (i.e., students from Guangdong) would be available for these students. In addition, for these students, the co-province social ties may be readily expanded through the existing relationships of the significant others (e.g., relatives or close friends) who have been residing in Guangdong.

Study 1b

In Study 1a, we used the transition to university (moving within the same country) as a moving context in which cultural distance was relatively low. In Study 1b, we further tested whether the companionship of significant others would be associated with weaker motivation to make new friends in a context with relatively high cultural distance (moving to a different country). Specifically, we recruited students at a large university in Canada. The students had different nationalities and had moved from their home countries to Canada. We hypothesized that the companionship of significant others would be associated with fewer new friends among these students. Similar to Study 1a, we also explored whether the companionship of significant others would be related to the ratio of new friends from the same nationality as the students.

Method

Participants

We recruited participants through a research subject pool of a large university in Canada. Similar to Study 1a, the minimum sample size for attaining 80% power in detecting a small-to-medium effect size ($f^2 = 0.10$) for regression analyses with one predictor was 81 participants (Faul et al., 2009). In total, we successfully recruited 156 students (104 females, 66.7%; mean age = 19.19, $SD = 2.82$) to participate in an online survey. All participants were not Canadian-born, which indicates that they all had the moving experience from their home countries to Canada. Among them, 12 (7.7%) were of European ethnicity, 113 (72.4%) were of Asian ethnicity, 6 (3.8%) were of African ethnicity, and 25 (16.0%) belonged to other ethnicities. Furthermore, 70 participants (44.9%) were Canadian citizens, 38 participants (24.4%) were permanent residents in Canada, 47 participants (30.1%) were international students, and one participant did not report their status in Canada. The mean duration of residence in Canada among the participants was 6.51 years, $SD = 5.03$. 

Figure 1  (a) The mean number of new friends in Study 1a; “place” on the horizontal axis indicates province. (b) The mean number of new friends in Study 1b; “place” on the horizontal axis indicates nation. Error bars represent standard errors.
Measures

The companionship of significant others. Participants were asked, “When you first moved to Canada, did any of your significant others (e.g., family, partner, and friends) move together with you?” Participants answered the question by choosing “yes” or “no.” In this study, 120 participants (76.9%) moved to Canada with the companionship of significant others.

The number of new friends since university. We asked participants to indicate the number of new friends they had made since they came to study at the university by specifying (a) the number of new friends from the same nationality as the participant and (b) the number of new friends from different nationalities compared to them. We computed participants’ total number of new friends as the sum of (a) and (b). In this study, participants’ total number of new friends ranged from 0 to 201, \( M = 14.81, \ SD = 20.34 \). As the total number of new friends deviated from a normal distribution (Skewness = 5.80, Kurtosis = 47.03), we conducted log transformation for the raw data, and the transformation successfully removed the non-normality (Skewness = -0.27, Kurtosis = 0.64). The transformed data were used in the regression analysis reported below. Furthermore, we computed the ratio of new friends from the same place of origin: \( \frac{a}{a} + b \). A higher score indicates a higher ratio of new friends from the same place of origin as the participants. The ratio of new friends from the same place of origin ranged from 0 to 1, \( M = 0.41, \ SD = 0.32 \), and it did not deviate from a normal distribution (Skewness = 0.24, Kurtosis = -1.16).

Demographic information. Finally, participants provided their demographic information, including gender, age, ethnicity, nationality, duration of residence in Canada (in years), and status in Canada (1 = citizen, 2 = permanent resident, 3 = international student, 4 = other).

Results

Figure 1b shows the results of the number of new friends among the students with versus without the companionship of significant others in Study 1b. The analytical procedure in Study 1b was similar to Study 1a. First, we ran a regression analysis for the total number of new friends using the companionship of significant others as a predictor (1 = with the companionship of significant others, 0 = without the companionship of significant others). Importantly, the results showed that the companionship of significant others was associated with fewer new friends in total, \( b = -0.23, \ SE = 0.08, \ t = -2.97, \ p = .003, \ 95\% \ CI = [-0.38, -0.08]. \) However, this association became non-significant when controlled for participants’ gender, age, duration of residence in Canada, and status in Canada (1 = migrants–citizens/permanent residents; 0 = international students), \( p = .631 \).

Next, we tested whether the companionship of significant others was associated with a lower ratio of new friends from the same place of origin. Among the 156 participants, 7 participants did not make any new friends, and all of them moved with significant others. With a zero score in the total number of new friends, we were not able to compute the ratio of new friends from the same place of origin for these students, therefore they were excluded from the analysis. Furthermore, 32 participants indicated that they were of Canadian nationality. For these participants, friends from the same nationality as themselves may not indicate friends from the same country of origin but rather may mean native Canadian friends; thus, they were also excluded from the analysis. Among the 117 participants in the valid sample, the companionship of significant others was negatively related to the ratio of new friends from the same place of origin, \( b = -0.16, \ SE = 0.06, \ t = -2.73, \ p = .007, \ 95\% \ CI = [-0.27, -0.04]. \) However, this association was not significant when controlled for participants’ gender, age, duration of residence in Canada, and status in Canada (1 = migrants–citizens/permanent residents, 0 = international students), \( p = .101 \).

Discussion

In Study 1b, students who moved to a different country with the companionship of significant others were found to have fewer new friends than those without companionship. This finding provided further evidence for the association between the companionship of significant others and a weaker motivation for movers to expand their social networks. Furthermore, in contrast to Study 1a, the results related to the ratio of co-national new friends supported our expectation such that the companionship of significant others was significantly related to a lower ratio of new friends from the same place of origin (i.e., the same nationality).

However, we note that the findings in Study 1b should be interpreted with caution. The results became non-significant when demographic factors were controlled. For instance, the companionship of significant others may be confounded by other factors such as participants’ status in Canada (whether they were migrants or international students). Among the citizens/permanent residents \( (n = 108) \), 98.1% moved with the companionship of significant others; among the international students \( (n = 47) \), 29.8% moved with the companionship of...
significant others. We address this limitation in Study 2, an experimental study. Second, the ratio of co-national new friends may be confounded by the number of co-national students enrolled in the university.

**Study 2**

Study 2 extended Studies 1a and 1b in several ways. First, we used an experiment to investigate the causal relationship between the companionship of significant others and motivation to make new friends. In Studies 1a and 1b, using the number of new friends to indicate participants’ motivation to make new friends had limitations. Apart from weaker motivation to make new friends (Ojanen et al., 2010), other factors such as language or communication skills (Kudo & Simkin, 2003; Lou & Noels, 2020) could also predict a smaller social network. The correlational nature of Studies 1a and 1b also failed to provide support for any causal effect of the companionship of significant others on motivation to make new friends. Moreover, as discussed earlier, migrant/student status was a potential confounding variable in Study 1b, limiting the reliability of the findings. To address these limitations of Studies 1a and 1b, we manipulated the companionship of a significant other and directly measured participants’ motivation to make new friends.

Furthermore, in Study 2, we combined the two conditions in Studies 1a (moving within the same country) and 1b (moving to a different country) to systematically test whether cultural distance would moderate the influence of the companionship of significant others on movers’ motivation to make new friends. We assumed that moving within the same country indicates a smaller cultural distance compared to moving to a different country. Previous research found that greater cultural distance was associated with more difficulties during the acculturation process (Demes & Geeraert, 2014). Based on these findings, moving to a different country should entail more difficulties, which means that the companionship of a significant other is likely to be more effective in providing social support and buffering against loneliness-sadness. Therefore, we expected that the companionship of a significant other would have a stronger effect in reducing motivation to make new friends among those who moved to a different country than those who moved within the same country.

Moreover, we investigated the underlying mechanism of the effect of the companionship of significant others on motivation to make new friends by focusing on the role of affect. Studies 1a and 1b provided preliminary evidence for the association between the companionship of significant others and weakened motivation to make new friends. In Study 2, we further tested the mediating effects of positive affect and negative affect in accounting for the effect of the companionship of significant others. In terms of negative affect, we specifically focus on loneliness and sadness, because it was found that high residential mobility (vs. low residential mobility) only affected loneliness-sadness but not anxiety (Oishi et al., 2013). As discussed in the introduction, the companionship of significant others would buffer against negative affect, including loneliness-sadness, and induce stronger positive affect in the movers, which could make a large social network less necessary for them, hence resulting in weaker motivation to make new friends.

Finally, one alternative explanation for the effect of the companionship of significant others on movers’ weaker motivation to make new friends is that simply the companionship of an acquaintance might be sufficient to satisfy the movers’ need for social support and make them less enthusiastic about making new friends. To test this alternative explanation, we compared the effects of the companionship of a significant other, the companionship of an acquaintance, and no companionship (i.e., moving alone and having no acquaintance in the new place).

**Method**

**Participants**

A statistically significant medium effect (3 × 2 design), $f = 0.20, p = .05$, would need about 244 participants to attain 80% power (Faul et al., 2009). Finally, we recruited 249 students at a large university in China (101 females, 40.6%; mean age = 19.50, SD = 4.63). They were recruited in an introductory psychology course. All participants finished an online questionnaire and received a random amount of money from 1 RMB to 200 RMB as payment for participation.

**Materials and procedure**

**Manipulation of companionship and cultural distance.** After giving consent, participants were randomly assigned to one of six conditions of a 3 (companionship: companionship of a significant other vs. companionship of an acquaintance vs. no companionship) × 2 (cultural distance: within the same country vs. to a different country) factorial design. Participants first read the instruction, “Within the next ten minutes, please follow the instructions below and imagine that you run into the situation described. Then, please answer the questions following the situation.” In the “companionship of a significant other” condition, participants were asked to imagine moving to a totally new city (i.e., a city they had never been to before) within the same
Demographic information. Finally, participants provided their demographic information and then were fully debriefed.

Plan of analysis
To test our hypotheses, we first examined the associations between the main variables and checked whether the patterns differed across conditions. Next, we conducted multiple one-way analyses of variance (ANOVA) to test the differences of conditions in motivation to make new friends, positive affect, and negative affect, separately. Finally, we conducted mediation analyses to test the mediating roles of both positive affect and negative affect in accounting for the effect of the companionship of significant others on movers’ motivation to make new friends. In the analyses, we specifically focused on comparing the “companionship of a significant other” condition with the “no companionship” condition and the “companionship of an acquaintance” condition. However, to fully disclose our results, we also reported the results of comparing the “companionship of an acquaintance” condition and the “no companionship” condition.

Results
Preliminary analysis
Table 1 shows descriptive statistics of the main variables in this study and the zero-order correlations among them. Positive affect was negatively correlated with motivation to make new friends, \( r = -0.13, \ p = .038 \). Furthermore, the regression analysis on motivation to make new friends showed that none of the interaction effects between positive affect and the companionship conditions or the cultural distance conditions were

Table 1
Descriptive Statistics of and Zero-Order Correlations among Key Variables in Study 2

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>M</th>
<th>SD</th>
<th>Motivation to Make New Friends</th>
<th>Positive Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivations to make new friends</td>
<td>1–7</td>
<td>4.85</td>
<td>1.52</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Positive affect</td>
<td>0–3</td>
<td>0.12</td>
<td>0.39</td>
<td>–0.13*</td>
<td>–</td>
</tr>
<tr>
<td>Negative affect</td>
<td>0–4</td>
<td>0.27</td>
<td>0.59</td>
<td>0.08</td>
<td>–0.13*</td>
</tr>
</tbody>
</table>

Note. *p < .05.

country (vs. to a different country) with the companionship of a significant other (e.g., family, friend, partner). In the “companionship of an acquaintance” condition, participants were asked to imagine that they moved to a totally new city within the same country (vs. to a different country) by themselves, and yet they had an acquaintance living in that city. In the “no companionship” condition, they were asked to imagine moving to a totally new city within the same country (vs. to a different country) by themselves and they did not have any acquaintance living in that city. The detailed information of all six conditions is provided in the Appendix. All participants were then instructed to describe in as much detail as possible how their lives would be under the given situation. We used Excel for coding the open-ended responses for the data of positive and negative affect.

Positive affect. Following the procedure of Oishi et al. (2013), we used Excel to count the number of words expressing positive affect [i.e., 美好 (fine), 幸福 (happy), 快乐 (cheerful), 开心 (joyful), and 愉快 (delighted)]. The total word count of these positive affect-related words was used as an indicator of positive affect. The number of words expressing positive affect ranged from 0 to 3, \( M = 0.12, SD = 0.39 \).

Negative affect. We used the similar procedure to count the number of words expressing loneliness-sadness [i.e., 孤单 (lonely), 孤独 (isolated), 寂寞 (lonesome), 无助 (helpless), and 难受 (depressed)]. The sum of the word count of these words was used as an indicator of negative affect. The number of words expressing negative affect ranged 0–4, \( M = 0.27, SD = 0.59 \).

Motivation to make new friends. In Studies 1a and 1b, we obtained mixed results regarding the association between the companionship of significant others and the ratio of new friends from the same place of origin. These mixed findings suggested a rather complicated relationship between the companionship of significant others and movers’ motivation to make friends with those from the same place of origin. Therefore, we left this potentially important and yet complicated question for future investigation. Here, we only focused on motivation to make new friends in general, regardless of the place of origin. After the writing task, participants finished a 4-item scale measuring their motivation to make new friends given the described situation. This measure was adopted from Oishi et al. (2013). One sample item included, “eager to make friends.” Participants indicated the extent to which they felt as described in each statement on a 7-point scale (1 = not at all, 7 = extremely). The Cronbach’s \( \alpha \) of this measure was .91.
significant, ps > .290, indicating that the companionship conditions and the cultural distance conditions did not moderate the association between positive affect and motivation to make new friends. In contrast, negative affect was not significantly related to motivation to make new friends, r = .08, p = .228. The interaction effects between negative affect and both the companionship conditions and the cultural distance conditions were also not significant, ps > .545, indicating that negative affect did not interact with the companionship conditions or the cultural distance conditions to influence participants' motivation to make new friends.

**Mean differences**

First, we ran a two-way ANOVA with motivation to make new friends as the dependent variable. The main effect of the companionship condition was significant, F(2, 243) = 3.43, p = .034, partial η² = .03. Multiple comparison analysis showed that participants in the “companionship of a significant other” condition (M = 4.60, SE = 0.16) had weaker motivation to make new friends than those in the “no companionship” condition (M = 5.17, SE = 0.16), p = .011. However, participants in the “companionship of a significant other” condition and those in the “companionship of an acquaintance” condition (M = 4.76, SE = 0.18) did not differ in their motivation to make new friends, p = .504. Furthermore, participants in the “companionship of an acquaintance” condition had similar level of motivation to make new friends as those in the “no companionship” condition, p = .086. In contrast, the main effect of the cultural distance condition was not significant, F(1, 243) = 0.46, p = .499, η²p = .002. The interaction effect of the cultural distance condition and the companionship condition was also not significant, F(2, 243) = 1.12, p = .329, η²p = .01. Figure 2a provides the means and standard errors of motivation to make new friends in the different conditions.

Next, we ran a two-way ANOVA with positive affect as the dependent variable. The main effect of the companionship condition was significant, F(2, 243) = 4.93, p = .008, η²p = .04. Multiple comparison analysis showed that participants in the “companionship of a significant other” condition (M = 0.23, SE = 0.04) expressed significantly stronger positive affect than those in the “no companionship” condition (M = 0.07, SE = 0.04), p = .005, and those in the “companionship of an acquaintance” condition (M = 0.07, SE = 0.05), p = .012. However, participants in the “companionship of an acquaintance” condition and those in the “no companionship” condition did not show difference in positive affect, p = .918. The main effect of the cultural distance condition was not significant, F(1, 243) = 1.86, p = .174, η²p = .01. The interaction effect of the cultural distance condition and the companionship condition was also not significant, F(2, 243) = 0.93, p = .397, η²p = .01. Figure 2b provides the means and standard errors of positive affect in the different conditions.

Next, we ran a two-way ANOVA with negative affect as the dependent variable. The main effect of the
companionship condition was significant, $F(2, 243) = 17.69, p < .001, \eta^2_p = .13$. Multiple comparison analysis showed that participants in the “companionship of a significant other” condition ($M = 0.09, SE = 0.06$) experienced weaker negative affect than those in the “no companionship” condition ($M = 0.54, SE = 0.06$), $p < .001$. However, participants in the “companionship of a significant other” condition and those in the “companionship of an acquaintance” condition ($M = 0.13, SE = 0.07$) did not significantly differ in negative affect, $p = .643$. Furthermore, participants in the “companionship of an acquaintance” condition experienced weaker negative affect than those in the “no companionship” condition, $p < .001$. The main effect of the cultural distance condition was not significant, $F(1, 243) = 3.48, p = .063, \eta^2_p = .01$, and the interaction effect of the cultural distance condition and the companionship condition was also not significant, $F(2, 243) = 1.07, p = .345, \eta^2_p = .01$. Figure 2c shows the means and standard errors of negative affect in the different conditions.

Mediation analyses

Finally, we used the SPSS macro PROCESS (Model 4) (Hayes, 2017) to investigate the mediating roles of both positive affect and negative affect in the effect of the companionship of a significant other on motivation to make new friends. In the tested mediation models, we included the companionship condition as a multi-categorical independent variable (companionship of a significant other vs. companionship of an acquaintance vs. no companionship) and motivation to make new friends as the dependent variable. Furthermore, we entered positive affect and negative affect simultaneously as mediators. Five thousand bootstrap samples were applied to create 95% bias-corrected CIs. Furthermore, following Hayes and Cai’s (2007) recommendation that heteroscedasticity-consistent standard error (HCSE) estimator should be used routinely in all Ordinary Least Squares regressions, we used the HC0 HCSE estimator in the mediation analyses. Figure 3 presents the results of the mediation analyses.

Results revealed that the relative indirect effect of the companionship of a significant other (compared to the “no companionship” condition) via positive affect was significant, indirect effect $= −0.07, SE = 0.04, 95\% CI = [−0.16, −0.001]$. As presented in Figure 3b and c, the companionship of a significant other (compared to both the “no companionship” condition and the “companionship of an acquaintance” condition) was associated with stronger positive effect, which was, in turn, associated with weaker motivation to make new friends. Finally, the relative indirect effect of the companionship of an acquaintance (compared to the “no companionship” condition) via positive affect was also significant, indirect effect $= −0.07, SE = 0.04, 95\% CI = [−0.16, −0.001]$. As presented in Figure 3b and c, the companionship of a significant other (compared to both the “no companionship” condition and the “companionship of an acquaintance” condition) was associated with stronger positive affect, which was, in turn, associated with weaker motivation to make new friends. Finally, the relative indirect effect of the companionship of an acquaintance (compared to the “no companionship” condition) via positive affect was also significant, indirect effect $= −0.07, SE = 0.04, 95\% CI = [−0.16, −0.001]$.

In contrast, results showed that the relative indirect effect of the companionship of a significant other via negative affect was not significant, regardless of whether the reference group was the “no companionship” condition (indirect effect $= −0.01, SE = 0.06, 95\% CI = [−0.13, 0.12]$) or the “companionship of an acquaintance” condition (indirect effect $= −0.001, SE = 0.01, 95\% CI = [−0.02, 0.02]$) (see Figure 3b and c). Moreover, the relative indirect effect of the companionship of an acquaintance (compared to the “no companionship” condition) via negative affect was also not significant, indirect effect $= −0.01, SE = 0.06, 95\% CI = [−0.13, 0.11]$ (see Figure 3a).

Discussion

In this study, we demonstrated that the companionship of a significant other had a causal effect on weakening people’s motivation to make new friends, via promoting positive affect (compared to both no companionship and the companionship of an acquaintance). In contrast, the indirect effect via reducing negative affect was not significant. The results suggested that positive affect but not negative affect was the underlying mechanism in the effect of the companionship of significant others on movers’ motivation to make new friends.

Furthermore, the findings did not show a significant effect of the companionship of an acquaintance, which suggested the unique effect of the companionship of a significant other in shaping the degree of motivation to make new friends. Significant others represent strong social ties that provide strong emotional and instrumental support to a person, whereas acquaintances represent weak social ties of an individual that simply provide instrumental support (Meier & Daniels, 2013). Therefore, this result might highlight the importance of strong social ties and the accessibility of emotional

Figure 3  Study 2: The indirect effect of the experimental conditions on motivation to make new friends via positive affect and negative affect. Unstandardized coefficients are reported.
(a) The indirect effect of the companionship of an acquaintance (compared to no companionship)

\[ b = 0.005, SE = 0.04, p = .913 \]

Positive Affect \[ b = -0.43, SE = 0.22, p = .046 \]

Acquaintance = 1, Alone = 0 \[ b = -0.42, SE = 0.09, p < .001 \]

Total effect: \[ b = -0.42, SE = 0.24, p = .086 \]

Direct effect: \[ b = -0.40, SE = 0.25, p = .108 \]

Motivation to Make New Friends \[ b = 0.03, SE = 0.14, p = .836 \]

Negative Affect

(b) The indirect effect of the companionship of a significant other (compared to no companionship)

\[ b = 0.16, SE = 0.06, p = .012 \]

Positive Affect \[ b = -0.43, SE = 0.22, p = .046 \]

Significant other = 1, Alone = 0 \[ b = -0.45, SE = 0.09, p < .001 \]

Total effect: \[ b = -0.57, SE = 0.22, p = .009 \]

Direct effect: \[ b = -0.49, SE = 0.23, p = .035 \]

Motivation to Make New Friends \[ b = 0.03, SE = 0.14, p = .836 \]

Negative Affect

(c) The indirect effect of the companionship of a significant other (compared to the companionship of an acquaintance)

\[ b = 0.15, SE = 0.06, p = .015 \]

Positive Affect \[ b = -0.43, SE = 0.22, p = .046 \]

Significant other = 1, Acquaintance = 0 \[ b = -0.04, SE = 0.06, p = .493 \]

Total effect: \[ b = -0.16, SE = 0.25, p = .531 \]

Direct effect: \[ b = -0.09, SE = 0.25, p = .720 \]

Motivation to Make New Friends \[ b = 0.03, SE = 0.14, p = .836 \]

Negative Affect

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support for movers’ well-being and interpersonal relationships.

We also had some unexpected findings. First, we did not find evidence for the mediating role of negative affect (loneliness and sadness), which contradicted previous research showing that loneliness was associated with stronger motivation to make new friends (Apostolou et al., 2021; Cacioppo et al., 2014). These inconsistent findings might be due to different cultural contexts involved in the studies. While most previous studies revealing a positive association between loneliness and motivation to expand social networks were conducted in Western societies with relatively high relational mobility, our study was conducted in China, a society with relatively low relational mobility (Liu et al., 2021). Relational mobility refers to the degree of freedom a society affords individuals to establish interpersonal relationships based on personal preference (Thomson et al., 2018). In a low relational mobility society like China, people have relatively fewer opportunities to establish new social ties, and people’s interpersonal relationships tend to be stable and less flexible. In such environments, people tend to have low social efficacy in making new friends and thus find it stressful and anxiety-provoking (Heu et al., 2020; Lou & Li, 2017). In other words, the making of new friends may not be a possible means to buffer people’s negative affect from moving, and may even increase their stress and anxiety. As a result, people in a low relational mobility society like China may be less likely to overcome loneliness through making new friends, which may weaken the association between loneliness and motivation to make new friends. Future research needs to investigate this possibility by integrating the theories and research on residential mobility and relational mobility.

In addition, we did not find evidence to support the moderating effect of cultural distance in the association between the companionship of a significant other and motivation to make new friends. This result might emerge because China is a large country with extensive cultural differences even between different regions within the country (Talhelm et al., 2018), therefore people moving within the same country might experience considerable stress and difficulties similar to those moving to a different country (Zhong et al., 2016).

**General discussion**

The current research investigated the influence of the companionship of significant others on movers’ motivation to make new friends. In Studies 1a and 1b, we consistently found that the companionship of significant others was associated with a smaller friendship network in the new environment among university students who moved within the same country (Study 1a) and to a different country (Study 1b). In Study 2, we demonstrated that the companionship of a significant other had a causal effect on reducing movers’ motivation to make new friends via enhanced positive affect but not via reduced negative affect. The companionship of a significant other, compared to both the companionship of an acquaintance and no companionship, led to stronger positive affect in the movers, which resulted in weaker motivation to make new friends.

**Implications**

This research provides important implications for the literature on residential mobility. In theories on residential mobility, its influence on individuals’ social networks is a core element (Oishi, 2010). People with more frequent residence relocation were found to have a relatively larger social network with weak and unstable social ties (Oishi, 2010). Furthermore, research showed that it was frequent movers’ strong loneliness and sadness associated with moving that underlay their strong motivation to make new friends (Oishi et al., 2013). Our findings extend and provide more nuance for these previous findings: Whether or not residential movers are motivated to expand their social networks depends on having the companionship of significant others. Movers having the companionship of a significant other, compared to movers having only the companionship of an acquaintance or no companionship, experienced stronger positive affect and thus their motivation to make new friends was weakened. Consistent with Magdol and Bessel’s (2003) research, the current study suggests that different types of moves could have distinctive effects on people’s social networks.

Furthermore, much research has revealed that residential mobility plays a role in influencing psychological health and well-being, with more moving experiences being negatively associated with children’s (Scanlon & Devine, 2001) and adults’ (M. Li et al., 2019; Oishi & Schimmack, 2010) psychological health. However, it remains largely under-studied what factors can moderate the negative effect of residential mobility on well-being. Our findings suggest that the companionship of significant others is likely to be one of the moderators that reduce the negative impact of residential mobility. Specifically, residential moves with the companionship of a significant other increased movers’ positive affect as well as reduced their negative affect (compared to moves without companionship). Extending the existing evidence that individual characteristics like personality (Oishi & Schimmack, 2010) and gender (Magdol, 2002) moderated the influence of residential mobility on individuals’ well-being, our findings suggest that ecological assets
(e.g., the companionship of significant others) can also be an important buffer for the negative effects of residential mobility.

This research also provides insights into acculturation research. Moving to a new place, which means the individual needs to adapt to a new cultural environment, entails the process of acculturation (Berry & Sabatier, 2011; Dolberg et al., 2016). It has been theorized that socio-cultural adaptation and psychological adaptation are two important and distinct dimensions for understanding migrants’ success during transitions (Berry et al., 2006; Ward & Kennedy, 1993). Socio-cultural adaptation refers to social competence in managing a functioning life in the new cultural setting, such as having a large friendship network (Rinties & Nolan, 2014; Wilson et al., 2017). In contrast, psychological adaptation refers to subjective well-being in the new cultural setting, such as having positive affect (Demes & Geeraert, 2014; Wilson et al., 2017).

Berry et al. (2006) found that different acculturation status was associated with socio-cultural adaptation and psychological adaptation in distinctive ways. For example, immigrants with an “ethnic acculturation profile,” who were highly involved in their ethnic cultures and their ethnic groups but less involved in the mainstream culture, showed good psychological adaptation but poor socio-cultural adaptation. Corroborating the distinction between socio-cultural adaptation and psychological adaptation, our research demonstrates that the companionship of a significant other affects psychological adaptation and socio-cultural adaptation differently, such that the companionship of a significant other was associated with stronger positive affect, but weaker motivation to expand social networks as well as a smaller friendship network size. In a related vein, some research found that kinfolk in the receiving society helped migrants with short-term adaptation (e.g., accommodation, transport) but hampered migrants’ long-term integration into the new society (Tilly & Brown, 1967). Taken together, these findings suggest that the companionship of a significant other has a rather complicated influence on movers’ adaptation process. We encourage future research to further investigate how the companionship of a significant other would influence movers’ socio-cultural adaptation and psychological adaptation differently.

Limitations and future directions

This research has a few limitations. First, we recruited university student samples for all studies, therefore it is unknown whether the current findings could be generalized to other moving populations, such as expatriates or different age groups like the children who attend schools overseas and elderly immigrants. Some moving populations are found to receive little social support from significant others; instead, they were burdened with the relationships. For example, immigrant women are particularly vulnerable to the violence of their partners, which affects their adjustment and subjective well-being (Erez, 2000). Some elderly immigrants have burdensome family demands and thus have limited time and energy to establish new social ties (Treas & Mazumdar, 2002). Future research should test whether the current findings could be replicated in other moving populations.

Second, this research only investigated the general effect of the companionship of significant others, which left it unclear how the number of significant others providing companionship would influence movers’ motivation to make new friends. Previous research showed that a larger size of close social networks predicted fewer depressive symptoms among immigrants (M. S. Lee et al., 1996), which suggests a potential role for the number of significant others in influencing movers’ friendship establishment. Furthermore, we did not differentiate the effects of various types of significant-other relationships, such as family, friends, and romantic partners. Future research needs to investigate whether the effect of the companionship of significant others would be contingent on the relationship type, as different relationships have distinct effects on buffering loneliness (C.-Y. S. Lee & Goldstein, 2016). In addition, the current research did not differentiate whether the significant others moved prior to or simultaneously with the mover. The mover may receive more instrumental support from the significant others who moved prior to them, as these significant others may have accumulated resources in the new place (Choldin, 1973). Future research should investigate whether and how the two types of companionship would distinctively influence movers’ motivation to expand social networks.

Third, the current research did not include non-movers (i.e., the stayers). Hence, it remains unknown whether the movers with the companionship of significant others would have a weaker motivation to make new friends than the non-movers. To address this limitation, future research should compare motivation to make new friends among the movers with the companionship of significant others, the movers without the companionship of significant others, and the non-movers.

Finally, all studies in our research were cross-sectional. It would be valuable for future research to adopt a longitudinal design to examine whether the effect of companionship may change or whether it will interact with other factors as time goes by.

Conclusion

This research is one of the first trials that investigated whether and how ecological assets shaped movers’ social network characteristics. Across three studies, we
demonstrated that the companionship of significant others was associated with weaker motivation to expand social networks and with a small friendship network in the new place. Furthermore, the results showed that positive affect (but not negative affect) played a mediating role in the association, in which the companionship of significant others gave rise to stronger positive affect, and in turn, led to weaker motivation to make new friends. Our findings highlight the importance of a nuanced examination of the influence of residential mobility on people’s well-being and social networks.

Conflict of interest
None.

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Data availability statement
The data that support the findings of the studies are available from the corresponding author upon request.

Research materials statement
Research materials in all studies have been provided in the Appendix.

Pre-registration Statement
The study was not pre-registered.

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The Number of New Friends Since University.
Since you came to study at this university, how many new friends have you made?
Please indicate the number of your new friends by nationality.

(1) With the same nationality as me:
(2) With a different nationality:

Study 2
Manipulation of Companionship and Cultural Distance.
Within the next ten minutes, please follow the instructions below and imagine that you run into the situation described. Then, please answer the questions following the situation.

The “Companionship of a Significant Other” Condition.
You moved to a city which you had never been to before within the country (vs. to a different country) together with a person who is very important to you (such as your family, friend, partner).

The “Companionship of an Acquaintance” Condition.
You moved to a city which you had never been to before within the country (vs. to a different country) by yourself and yet you had an acquaintance living in that city.

The “No Companionship” Condition.
You moved to a city which you had never been to before within the country (vs. to a different country) by yourself and you did not have any acquaintance living in that city.

Please describe, in as many details as possible, how your life would be under this situation.

Motivation to Make New Friends (Oishi et al., 2013).
In this situation, to what extent would you have each of the following thoughts? (1 = not at all to 7 = very strong)

(1) Eager to make friends
(2) Want to meet new people
(3) Like to expand my social network
(4) Excited to meet new people

Note. Study 1a and Study 2 were conducted in China, therefore the original research materials of the two studies were in Chinese. Here we present the translated English versions.