

**Sense of belonging, international migrants' spending, and implications for their  
subjective well-being**

**Haiming Hang (correspondence author)**

School of Management

University of Bath

Bath, U.K.

BA2 7AY

Email: [h.hang@bath.ac.uk](mailto:h.hang@bath.ac.uk)

Tel: +44 (0)1225 383765

**Jing Yang Zhong**

Birmingham City Business School

Birmingham City University

Birmingham, U.K.

B4 7BD

Email: [Jingyang.zhong@bcu.ac.uk](mailto:Jingyang.zhong@bcu.ac.uk)

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## Abstract

A lack of a sense of belonging in the host country has become one of the most common challenges facing international migrants in today's sociopolitical environment. Our two online experiments with 881 international migrant workers in the United States jointly demonstrate that, to cope with their lack of a sense of belonging in the host country, international migrants may spend money suboptimally: more on material purchases but less on experiential and prosocial purchases. More importantly, our studies suggest that prosocial purchases are more effective than experiential purchases in increasing international migrants' subjective well-being. This is because prosocial purchases can lead to both relatedness need satisfaction and beneficence, with each independently contributing to international migrants' subjective well-being. Our research suggests that public policymakers should address the social exclusion international migrants experience when moving to a new country because it can have a negative impact on their subjective well-being. Our research further suggests that one way to mitigate social exclusion is to encourage international migrants to spend money on others rather than themselves.

*Keywords:* subjective well-being, international migrants, experiential consumption, prosocial spending, sense of belongingness

## INTRODUCTION

Subjective well-being (SWB) reflects people's own evaluations of and feelings about the quality of their lives (Diener, 1984). Diener et al. (2018) further suggest that SWB includes life satisfaction both (cognitive evaluation) and happiness (emotional evaluation). High levels of SWB can confer a variety of benefits, including longevity (Chida & Steptoe, 2008) and better health (Lamers et al., 2012). As a result, SWB is now included as a key index in national accounts around the world (Diener et al., 2018).

Human migration has emerged as a major global phenomenon, with about 244 million people moving to another country in 2015 (International Organization of Migration, 2018). The existing literature on international migrants' SWB focuses on their economic gains (see Hendriks, 2015 for a review) but ignores the psychological threats they may face when moving to another country. The consumer acculturation literature has provided rich insights into how adapting to (or resisting) a new culture in the destination country can be stressful for migrants (see Luedicke, 2011 for a review). In particular, this research stream identifies the lack of a sense of belonging in the host country as the most stressful factor in the acculturation process (Berry et al., 1987; Mena et al., 1987). Feelings of not belonging can lead to isolation and social exclusion, causing deterioration in international migrants' psychological, social, and somatic health (Berry et al., 1987; Chakraborty & Chattaraman, 2021). Therefore, how international migrants cope with a lack of a sense of belonging can have important implications for their SWB. However, international migrants' material welfare still dominates the focus of policymakers. This is surprising because Diener and colleagues have repeatedly argued that happiness is not only determined by money but also by the fulfillment (or lack thereof) of basic psychological needs (Diener et al., 2018).

Thus, the main purpose of this paper is to identify how international migrants spend money to establish and maintain ties with the mainstream culture to reduce their lack of a sense of

belonging and the implications for their SWB. Sense of belonging has been defined as “the feeling, belief, and expectation that one fits in the group and has a place there, a feeling of acceptance by the group, and a willingness to sacrifice for the group” (Macmillan & Chavis, 1986 p. 10). Using the basic psychological need theory (Ryan & Deci, 2017), we first argue that when sense of belonging is threatened, it undermines the basic psychological need of relatedness; namely, feelings of securely connecting to the mainstream culture. Based on existing spending science literature (for reviews, see Aknin et al., 2018; Gilovich et al., 2015), we further argue that international migrants prefer spending money on material purchases (a tangible object to keep in their possession; Van Boven & Gilovich, 2003) to cope with their lack of a sense of belonging. This is because the high visibility of material goods can help international migrants signal their connection with the mainstream culture (Mead et al., 2011). Alternatively, they can anthropomorphize goods as an alternative means to obtain social assurance (Mourey et al., 2017).

We further argue that both experiential purchases (acquiring a life experience; Van Boven & Gilovich, 2003) and prosocial purchases (spending money on others rather than oneself; Dunn et al., 2008) can enhance international migrants’ SWB, with prosocial purchases more effective than experiential purchases. This is mainly because both experiential purchases and prosocial purchases can satisfy the need for relatedness, but prosocial purchase can also lead to beneficence, or “one’s sense of having a positive impact in the lives of other people” (Martela et al., 2018, p. 1263). The existing literature suggests that beneficence can enhance both SWB and meaningfulness in life without actual contact with the beneficiary (Martela & Ryan, 2016a, 2016b; Martela et al., 2018), and thus it can independently contribute to SWB (Martela et al., 2018). In this paper, we focus primarily on long-term international migrants who stay in the host country for at least 12 months, because sojourners or temporary residents

may have different cultural experiential goals than those who want to permanently settle in the host country (Vredeveld & Coulter, 2019).

Our paper makes the following contributions to the literature: first, it suggests that focusing on the psychological threats that international migrants need to deal with in the host country can provide unique insights into their SWB. Our studies jointly demonstrate that, to cope with their lack of a sense of belonging, international migrants may spend money suboptimally: more on material purchases but less on experiential and prosocial purchases. Second, to the best of our knowledge, our paper is the first to compare the impact of experiential versus prosocial purchases on SWB. Our studies demonstrate that prosocial purchases are more effective than experiential purchases in increasing international migrants' SWB. This has the potential to integrate separate research streams (material versus experiential purchases and prosocial spending) and offer a more holistic view of how money can be spent to increase SWB. Third, our results suggest that the impact of prosocial purchases on SWB is driven primarily by relatedness need satisfaction and beneficence. Thus, our paper not only documents the superiority of prosocial purchases but also reveals the key mechanisms that lead to this superiority. Finally, the existing acculturation literature focuses on using social support and professional advice to reduce acculturative stress (Mena et al., 1987).

Chakraborty and Chattaraman (2021) provide rare insights into how international migrants use consumption to reduce acculturative stress, but their research focuses solely on reaffirming ethnic identity in a new cultural environment. Our research complements theirs by providing unique insights into how consumption can be used to establish and maintain ties with the mainstream culture and the relevant implications for international migrants' SWB.

## CONCEPTUAL BACKGROUND

### *Sense of Belonging and International Migrants' SWB*

The study of international migration has traditionally been dominated by economic theories relating to labor markets. These theories assume that international migrants moving to another country can enjoy a better life by exploiting strong labor markets and wage differentials between their home and host countries (Massey et al., 1993). In general, previous literature suggests that international migrants can achieve economic success in their destination country (Nikolova & Graham, 2015). As a result, existing studies on international migrants' SWB focus on whether economic gains in the host country can make international migrants happier, but the results have been inconclusive (de Vroome & Hooghe 2014; Stillman et al., 2015). For example, Stillman et al. (2015) found that while Tongan migrants' incomes tripled after moving to New Zealand, they were less happy than those who stayed in Tonga. By contrast, de Vroome and Hooghe (2014) suggested that increased wealth could enhance international migrants' SWB, because wealthier migrants were happier than their less well-off counterparts.

However, focusing on monetary gain alone may provide an incomplete picture of international migrants' SWB. The acculturation literature has repeatedly demonstrated that acquiring and adjusting to a new cultural environment is stressful (Berry et al., 1987; Chakraborty & Chattaraman, 2021). More importantly, this literature points out that a lack of sense of belonging in the host country is the most stressful factor in international migrants' acculturation process. For example, Berry et al. (1987) found feeling marginalized in the host country was the biggest stressor among different acculturating groups, while Mena et al. (1987) reported that feeling like an outsider caused the most stress when adapting to a new cultural environment. To reduce their acculturative stress, international migrants use

strategies such as seeking social support and professional advice (Mena et al., 1987). But how do international migrants use consumption to reduce acculturative stress? Chakraborty and Chattaraman (2021) provide rare insights into this issue. Their research found that first-generation Indian Americans used ethnic symbols like eating Indian food to reduce acculturative stress. However, Chakraborty and Chattaraman (2021) focus solely on reaffirming ethnic identity in a new cultural environment; what remains unclear is how consumption can be used to establish and maintain ties with the mainstream culture and thus mitigate international migrants' lack of a sense of belonging and the implications for their SWB.

To address this issue, we focus on the basic psychological need underlying the lack of a sense of belonging in the host country. The basic psychological need theory (Ryan & Deci, 2017) argues that people's well-being depends on the satisfaction of three innate, universal, and essential needs: *autonomy*, *competence*, and *relatedness*. Autonomy refers to the feeling that one's actions are one's own and not due to external factors, competence concerns one's ability to perform tasks effectively and with confidence, and relatedness reflects one's feeling of being securely connected with others or being part of a group (Ryan & Deci, 2017). Sense of belonging reflects a feeling of acceptance and inclusion by a certain group (Macmillan & Chavis, 1986). Conversely, the lack of a sense of belonging reflects international migrants' feelings that they are socially excluded in receiving countries (Bursztyn et al., 2020; Ford-Paz et al., 2020; Thomas, 2020; Tummala-Narra, 2020). This undermines their need for relatedness; that is, their feelings of connecting securely to the host country.

Baumeister and Leary (1995) argue that having positive social connections with others is fundamental to human survival and safety. Thus, when the need for relatedness is frustrated, it produces goal-directed behavior aimed at satisfying it, just as hunger causes people to work for food (Mead et al., 2011). The social psychology literature has repeatedly demonstrated

that feeling socially excluded makes people use various ways to reestablish affiliation (see DeWall & Richman, 2011 for a review). This is supported by the existing marketing literature. For example, socially excluded consumers spent more money on a product that would symbolize their group membership than socially included consumers. They also tailored their preferences to their partners, even when the products were physically unappealing (Mead et al., 2011). Social exclusion also increased consumers' intentions to donate because prosocial behaviors can enhance social acceptance (Lee & Shrum, 2012). Feeling isolation also made consumers anthropomorphize products for social assurance (Mourey et al., 2017).

More importantly, Mead et al. (2011) argue that consumption by socially excluded consumers needs to be visible to others to (re-)establish affiliation. This is because only visible consumption can help socially excluded consumers signal their connections with others (DeWall & Richman, 2011). The existing consumer acculturation literature echoes this finding, suggesting that international migrants tend to use high-visibility consumption to indicate their assimilation into the mainstream culture (Chakraborty & Chattaraman, 2021; Mehta & Belk, 1991; Penaloza 1994). For example, Chakraborty and Chattaraman (2021) found that ethnic identity self-discrepancy had a negative impact on first-generation Indian Americans' consumption of ethnic products, perhaps because the high visibility of such products can lead to their marginalization in the United States.

Prior research suggests that material purchases are more visible and tangible than experiential purchases (Gilovich et al., 2015). Therefore, we argue that international migrants prefer material purchases over experiential ones to signal their connection with the mainstream culture and cope with their lack of a sense of belonging. The next section discusses this in detail.



### *Material vs. Experiential Consumption*

In their seminal work, Van Boven and Gilovich (2003) define material purchases as those made with “the primary intention of acquiring a material possession—a tangible object that you obtain and keep in your possession”; by contrast, experiential purchases are those made with “the primary intention of acquiring a life experience—an event or series of events that you personally encounter or live through” (p. 1194). The spending science literature further suggests that people derive more enduring satisfaction and happiness from experiential than from material purchases (see Gilovich et al., 2015 for a review) for the following reasons: first, the social nature of experiential purchases can fulfill the basic psychological need for relatedness (Kumar & Gilovich, 2015). Indeed, socially shared experiences can make people happier than material possessions, but experiences enacted alone cannot (Caprariello & Reis, 2013). Second, people are more likely to talk about their experiential purchases than their material purchases (Kumar & Gilovich, 2015), which makes them more likely to build social bonds with their audiences (Van Boven et al., 2010). Third, experiential purchases are less susceptible to social comparisons (Carter & Gilovich, 2010). As a result, the presence of something better does not diminish the satisfaction of experiential purchases, whereas it can have a detrimental impact on the satisfaction of material purchases (Carter & Gilovich, 2010).

Based on this literature, we argue that coping with the lack of a sense of belonging makes international migrants prefer material purchases over experiential purchases to establish social connections with and feeling assimilated into the mainstream culture. Two different literature streams support our argument: first, consumer research on international migrants suggests that they tend to use high-visibility possessions such as clothing and furnishings to express their assimilation. For example, Mehta and Belk (1991) found that middle-class Indians living in the United States used clothing, food, and furnishing styles to reflect their

adaptation to American culture. Penaloza (1994) found Mexican migrants used high-visibility products such as clothing or cars to establish their identities in the United States. Luedicke (2015), meanwhile, reported that locals used migrants' consumption of high-visibility items to judge whether they were adapting to or resisting the mainstream culture. This is because material purchases are more tangible and visible to others than experiential ones. Thus, international migrants can use them to signal their connection with the mainstream culture (Mead et al., 2011).

Second, the social exclusion literature suggests that feeling socially excluded can foster materialism, valuing material possessions as a sort of "happiness medicine" (Pieters, 2013). This may be because feeling isolated makes consumers anthropomorphize goods as an alternative means of social assurance (Mourey et al., 2017). Taken together, we argue that a low sense of belonging makes international migrants prefer material purchases over experiential purchases because they can use the high visibility of material purchases to signal their connection with the mainstream culture (Mead et al., 2011). Alternatively, they can anthropomorphize goods to satisfy their need for relatedness (Mourey et al., 2017).

Therefore, we hypothesize the following:

*Hypothesis 1:* A low (vs. high) sense of belonging makes international migrants prefer material purchases over experiential purchases.

#### *Prosocial Purchases and SWB*

Prosocial purchases—that is, spending money on others—can enhance SWB (for reviews, see Aknin et al., 2018; Dunn et al., 2014). People become happier if they spend money on others rather than spending the same amount of money on themselves (Dunn et al., 2008). This finding is robust across different cultures (Aknin et al. 2013) and found even among children (Aknin et al., 2012).

The literature proposes two key mechanisms by which prosocial purchases can enhance SWB: first, they can satisfy the psychological need for relatedness (Aknin et al. 2013). A common finding in previous research is that prosocial spending directly promotes closeness to others (Dunn et al., 2014). For example, Aknin et al. (2013) found that prosocial spending increased people's happiness when their actions allowed for time spent with the recipient, such as taking a friend out for coffee. Dunn et al. (2008) found that spending money on gifts for others promoted intimacy and cohesiveness with others. More importantly, by directly measuring the need for relatedness, Martela and Ryan (2016a) found that the impact of prosocial spending on SWB was mediated by the satisfaction of the need for relatedness.

Second, prosocial purchases lead to beneficence or "one's sense of having a positive impact in the lives of other people" (Martela et al., 2018, p. 1263). Martela and colleagues found that beneficence enhanced both SWB and meaningfulness in life (Martela & Ryan, 2016a; Martela et al., 2018). This is because having a positive impact on others can increase social status (Griskevicius et al., 2010) and bring "warm-glow" feelings (Dunn et al., 2014). Indeed, Aknin et al. (2014) found that when donors knew how their dollars were used to help others, larger donations led to greater SWB; when such information was not available, however, larger donations did not lead to greater well-being (Aknin et al., 2014). More importantly, by directly measuring beneficence, Martela and Ryan (2016a) provided evidence that the impact of prosocial spending on SWB was mediated by beneficence. In addition, they found that beneficence was different from relatedness need satisfaction, because beneficence and relatedness need satisfaction independently mediated prosocial spending on SWB (Martela & Ryan, 2016a). Martela and Ryan (2016b) further suggested that beneficence made people happier without actual contact with the beneficiary, providing evidence that beneficence is different from relatedness need satisfaction.

Both experiential and prosocial purchases can enhance SWB by satisfying the need for relatedness (Aknin et al., 2013; Van Boven et al., 2010). However, prosocial purchases can also make people happier through beneficence (Martela & Ryan 2016a; 2016b). Thus, we further predict that prosocial purchases can enhance international migrants' SWB more than experiential purchases, because relatedness need satisfaction and beneficence independently mediate the impact of prosocial spending on SWB. In other words, we argue that prosocial purchases can make international migrants feel both socially connected to and have a positive impact on other people in the host society, leading to higher SWB:

*Hypothesis 2:* Prosocial purchases are more effective than experiential purchases in enhancing international migrants' SWB.

*Hypothesis 3:* Both relatedness need satisfaction and beneficence mediate the impact of prosocial purchases on international migrants' SWB.

## **STUDY 1**

### *Participants and Design*

Following the suggestion of Wessling et al. (2017), Study 1 used a two-survey process to recruit international migrants living in the United States via Amazon Mechanical Turk (MTurk). In the first survey, we recruited 1,800 participants with the cover story of collecting current MTurkers' demographic profiles. Through this, we identified 283 international migrants living in the United States for work-related reasons. We focus on international migrant workers to be consistent with the existing literature on international migrants' SWB (e.g., de Vroome & Hooghe 2014; Stillman et al., 2015). We contacted these 283 participants, all of whom accepted our invitation for Study 1. Each participant received a small monetary incentive for their participation. Full institutional ethical approval was granted for this study

which is in line with institutional, national, and international codes for research ethics and integrity.

The experiment was a one-factor (sense of belonging: low vs. high) between-subjects design in which participants were randomly assigned to one of the two conditions.

### *Manipulation and Procedure*

In the low sense-of-belonging condition, participants were asked to recall a memorable event after moving to the United States that made them feel like they did *not* belong to the country.

In the high sense-of-belonging condition, participants were asked to recall a memorable event after moving to the United States that did make them feel that they belonged to the country.

In order to check whether our manipulation was successful, we measured participants' sense of belongingness via two items: "I feel connected to the United States" and "I feel I belong to the United States" (1 = "Strongly disagree"; 9 = "Strongly agree";  $\alpha = .91$ ).

We then gathered participants' SWB and consumption preferences regarding the different types of purchases described below. We also collected participants' demographic information, materialism, and perceived financial safety as controls. Finally, all participants were thanked and debriefed.

### *Measures*

*SWB.* Participants' SWB was measured via a five-item life satisfaction scale developed by Diener et al. (1985). Sample items in this scale included "In most ways my life is close to my ideal," "The conditions of my life are excellent," and "I am satisfied with my life" (1 = "Not true at all"; 9 = "Completely true";  $\alpha = .91$ ).

*Consumption preferences.* Participants' preferences for experiential versus material purchases were gathered via their preferences in relation to two pairs of options (1 = "Definitely option

A”; 9 = “Definitely option B”). Each pair comprised a material purchase (e.g., a jean costing \$200) and an experiential purchase (e.g., a ticket for a concert that also cost \$200). These options were adapted from Kumar and Gilovich (2016).

In order to identify their preferences between material and prosocial purchases, participants were asked to indicate their preferences in relation to two pairs of options. Each option contained a material purchase (e.g., buying a box of chocolates as a treat for themselves) and a prosocial purchase (e.g., buying the same box of chocolates to share with friends) (1 = “Definitely option A”; 9 = “Definitely option B”). A separate test with 125 participants from MTurk confirmed these options to be equally attractive. In order to simplify data analysis, we transformed our original scale into a scale from  $-4$  to  $+4$ , with negative values reflecting preferences for material over experiential or prosocial purchases, and positive values reflecting the opposite. We then averaged these scores to form an index.

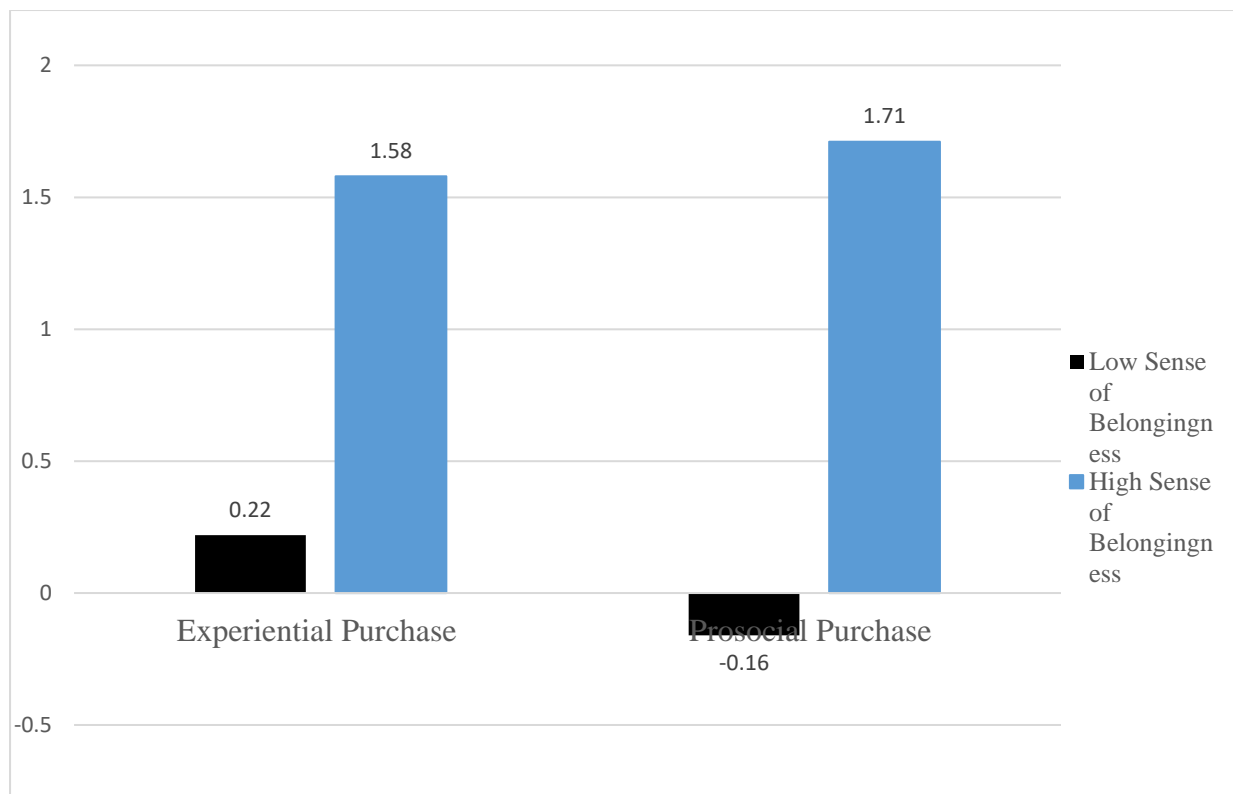
*Controls.* Because materialistic individuals are more likely to prefer buying tangible goods (Richins, 2004), we also measured participants’ materialism as a personal trait through seven items on materialism centrality (Richins, 2004). Sample items in the scale included “I enjoy spending money on things that aren’t practical,” “Buying things gives me a lot of pleasure,” and “I like a lot of luxury in my life” (1 = “Not true at all”; 9 = “Completely true”;  $\alpha = .73$ ). Because participants’ financial situations can influence their SWB, we also measured their perceived financial safety via the three items used in Chen et al. (2015a): “I feel that my financial situation is not good enough to support my family,” “I feel a strong sense of financial pressure,” and “I feel satisfied with my financial situation” (1 = “Not true at all”; 9 = “Completely true”;  $\alpha = .67$ ).

### *Results*

*Descriptive statistics and manipulation check.* The average age of participants in Study 1 was 30.61 (SD = 6.57). On average, they had been in the United States for 7.84 years (SD = 2.92). 79.9% of them were wage employees, 6.1% were not employed but were actively looking for work, and the rest were self-employed. Two thirds (66.8%) of participants had an income between \$37,951 and \$91,900.

An independent-sample t-test suggested participants' sense of belonging differed across conditions ( $t(281) = 6.99$ ,  $M_{\text{low}} = 5.68$ ,  $M_{\text{high}} = 7.32$ ,  $p < .001$ , Cohen's  $d = .84$ ). Participants in the low sense-of-belonging condition tended to recall a discriminatory event they experienced in their local communities or workplaces. Participants in the high sense-of-belonging condition tended to recall an event in which they were welcomed or accepted by their neighbors or colleagues. But participants' materialism ( $t(281) = .91$ ,  $p = .37$ ), length of stay ( $t(281) = .06$ ,  $p = .96$ ), and perceived financial safety ( $t(281) = .90$ ,  $p = .37$ ) did not differ.

*Consumption preferences.* In order to test our hypothesis, we conducted a one-way analysis of covariance (ANCOVA) with experimental condition as the independent variable, participants' consumption preferences as the dependent variable, and their materialism, length of stay, and perceived financial safety as covariates. The results indicated that participants in the low sense-of-belonging condition were less likely to prefer prosocial versus material purchases ( $M_{\text{low}} = -.16$ ,  $M_{\text{high}} = 1.71$ ,  $F(1, 282) = 17.70$ ,  $p < .001$ ,  $\eta^2 = .06$ ), and less likely to prefer experiential versus material purchases ( $M_{\text{low}} = .22$ ,  $M_{\text{high}} = 1.58$ ,  $F(1, 282) = 19.99$ ,  $p < .001$ ,  $\eta^2 = .07$ ) than those in the high sense-of-belonging condition. However, no control variables had significant impact on participants' consumption preferences (Figure 1).

**Figure 1.** Consumption Preferences Based on Experimental Conditions in Study 1

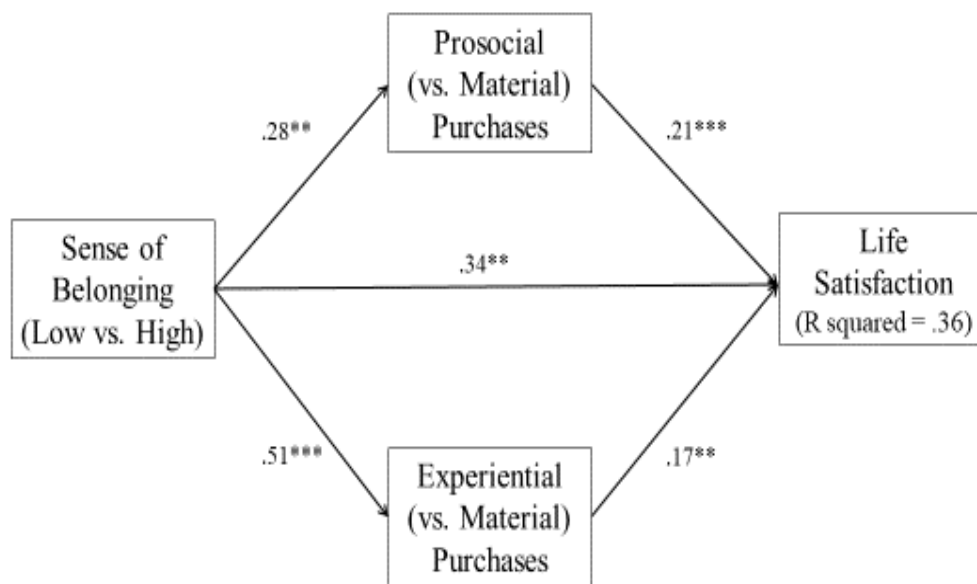
*SWB.* In order to explore the impact of experimental condition on life satisfaction, we performed another ANCOVA with experimental condition as the independent variable, participants' life satisfaction as the dependent variable, and their materialism, length of stay, and perceived financial safety as covariates. The results indicated that participants in the low sense-of-belonging condition had lower life satisfaction than those in the high sense-of-belonging condition ( $M_{\text{low}} = 6.45$ ,  $M_{\text{high}} = 7.29$ ,  $F(1, 282) = 20.44$ ,  $p < .01$ ,  $\eta^2 = .07$ ). In addition, materialism ( $F(1, 282) = 17.51$ ,  $p < .001$ ,  $\eta^2 = .06$ ) and perceived financial safety ( $F(1, 282) = 6.96$ ,  $p < .01$ ,  $\eta^2 = .02$ ) also had a significant impact on international migrants' SWB.

*Mediation analysis.* To determine whether consumption preferences mediated our experimental condition on life satisfaction, we conducted a parallel mediation analysis (Hayes PROCESS Model 4), with our experimental condition as the independent variable,



preferences for prosocial versus material and experiential versus material purchases as the parallel mediators, and life satisfaction as the dependent variable. We found the indirect effects on preferences for prosocial versus material purchases ( $b = .1791$ , 95% CI =  $.0399, .3434$ ) and for experiential versus material purchases ( $b = .1446$ , 95% CI =  $.0464, .2687$ ) were both significant (Figure 2). In addition, the direct effect of experimental condition on life satisfaction ( $b = .58$ ,  $SE = .22$ ,  $t = 2.64$ ,  $p < .01$ , 95% CI =  $.1476, 1.0084$ ) was still significant, suggesting partial mediation.

**Figure 2.** Mediation Analysis in Study 1



Note: \*\*  $p < .01$ , \*\*\*  $p < .001$

*Comparing the impact of prosocial vs. experiential purchases.* In order to compare the impact of experiential versus material and prosocial versus material purchases on SWB, we conducted an ordinary least squares regression with experiential versus material and prosocial versus material purchases as main predictors, and participants' materialism, length of stay, and perceived financial safety as controls. The overall model was significant ( $p < .001$ ,  $R^2 = .39$ ). In particular, both preferences for experiential versus material ( $b = .18$ ,  $p < .001$ ) and

prosocial versus material purchases ( $b = .25, p < .001$ ) were significant predictors. However, the two correlations unexpectedly did not significantly differ when they were compared ( $p = .37$ ).

### *Study 1 Discussion*

By manipulating international migrants' sense of belonging, Study 1 provides direct causal evidence for our framework. It suggests that a low (vs. high) sense of belonging makes international migrants less likely to prefer experiential versus material or prosocial versus material purchases. As a result, they have lower SWB. In addition, Study 1 suggests that prosocial purchases have a higher and positive correlation with SWB than experiential purchases. However, the difference is not statistically significant. This may be because participants' consumption preferences in Study 1 were gathered by measuring their preferences toward two pairs of options provided to them. This approach may not reflect participants' true preferences regarding experiential and prosocial purchases. Thus, in Study 2 we manipulated purchase types by asking participants to recall their "memorable" material, experiential, and prosocial purchases.

## **STUDY 2**

Study 2 has two key purposes: first, building on Study 1, it provides further evidence that prosocial purchases are more effective than experiential purchases at increasing international migrants' SWB. Second, and more importantly, Study 2 demonstrates that prosocial purchases can lead to both relatedness need satisfaction and beneficence, with each independently contributing to international migrants' SWB.

### *Participants and Design*

Using the same method as in Study 1, 598 (303 female) international migrant workers in the United States were recruited for this study.<sup>1</sup> The experiment used a 2 (sense of belonging: high vs. low)  $\times$  3 (purchase type: material vs. experiential vs. prosocial) between-subjects design.

### *Manipulation and Procedure*

Participants' sense of belonging was manipulated in the same way as in Study 1. In order to check whether our manipulation was successful, we measured participants' sense of belonging in the United States, just as had in Study 1 ( $\alpha = .90$ ). Participants were then randomly assigned to one of the purchase type conditions. The material and experiential purchase conditions were manipulated in the same way as in Van Boven and Gilovich (2003). Thus, in the material purchase condition, participants were asked to recall their most recent material purchase of more than \$100 that involved "spending money with the primary intention of acquiring a material possession—a tangible object that you obtain and keep in your possession." In the experiential purchase condition, participants were asked to recall their most recent experiential purchase of more than \$100 that involved "spending money with the primary intention of acquiring a life experience—an event or series of events that you personally encounter or live through," while in the prosocial purchase condition, participants were asked to recall their most recent purchase of more than \$100 that involved "spending money not for yourself but for others." We then asked participants to choose the type of purchase they had just recalled and the amount of money they had spent as a manipulation check.

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<sup>1</sup> We took the following two actions to avoid sample overlap between Study 1 and Study 2: first, we informed all participants that if they took part in our earlier international migrant study, they could not take part in the second one and would not be compensated for their time and effort. Two, we manually checked all participants' unique MTurk IDs; we found no overlaps.

### *Measures*

*SWB.* In order to test the robustness of our framework, Study 2 participants' SWB was gathered via their happiness, as measured using a 12-item scale developed by Diener et al. (2010). Sample items in this scale included "Positive," "Negative," "Good," and "Bad" (1 = "Very rarely or never" 9 = "Very often or always";  $\alpha = .95$ ).

*Psychological need satisfaction and beneficence.* Since we predict different types of purchases influence international migrants' SWB via relatedness need satisfaction and beneficence, we measured these variables as our mediators. Basic psychological need (autonomy, relatedness, and competence) satisfaction was measured with a nine-item scale developed by Chen et al. (2015b). Sample items in this scale included "I feel a sense of choice and freedom in the things I undertake," "I feel that the people I care about also care about me," and "I feel confident that I can do things well" (1 = "Not true at all"; 9 = "Completely true"; autonomy satisfaction:  $\alpha = .86$ ; relatedness satisfaction:  $\alpha = .88$ ; competence satisfaction:  $\alpha = .89$ ).

In order to gather participants' beneficence, we used the four-item scale from Martela and Ryan (2016b): "I feel that my actions have a positive impact on the people around me," "The things I do contribute to the betterment of society," "I have been able to improve the welfare of other people," and "In general, my influence in the lives of other people is positive" (1 = "Not true at all"; 9 = "Completely true";  $\alpha = .85$ ).

*Controls.* Griskevicius et al. (2010) suggest that prosocial purchases can be used for status-signaling, so we measured participants' subjective status in the same way as in Adler et al. (2008). We also collected participants' length of stay, age, and sex as key demographic variables.

## Results

*Descriptive statistics and manipulation check.* The average age of participants in Study 2 was 30.67 (SD = 6.72). On average they had been in the United States for 6.25 years (SD = 6.54); 76.9% of them were wage employees, 10.2% were not employed but actively seeking work, and the rest were self-employed. Almost three quarters (73.9%) of Study 2 participants had an income between \$37,951 and \$91,900.

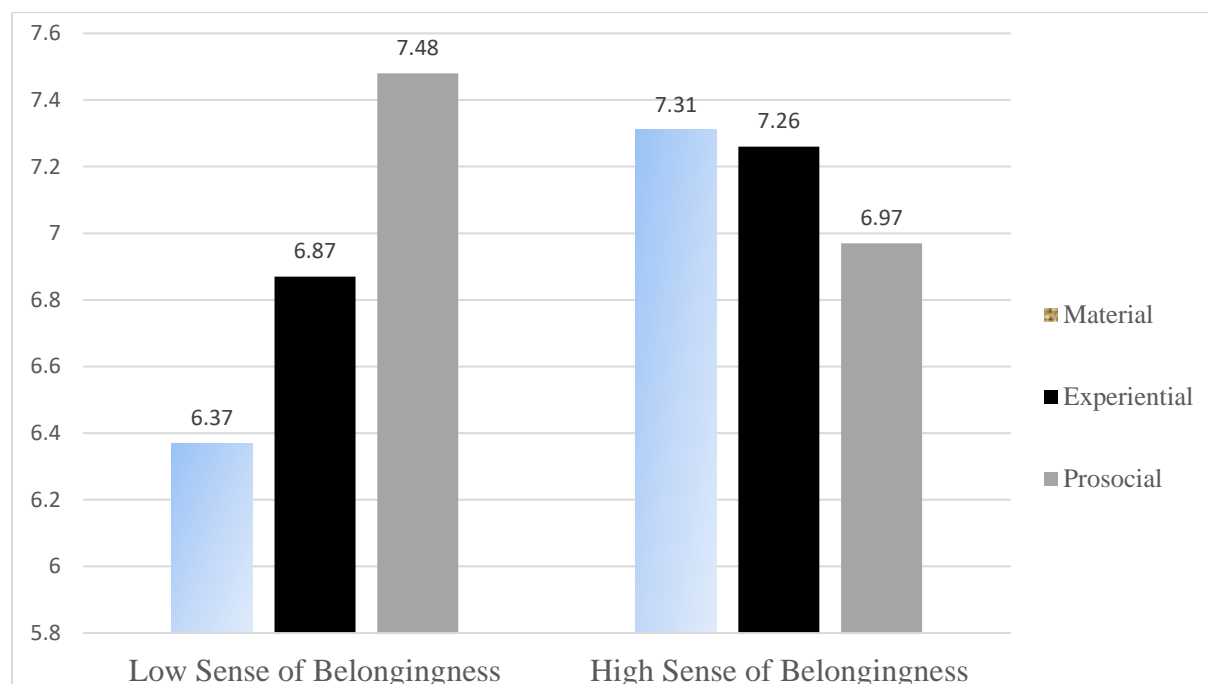
An independent-sample t-test indicated that participants' sense of belonging differed across conditions ( $t(596) = 5.22$ ,  $M_{\text{low}} = 6.96$ ,  $M_{\text{high}} = 7.60$ ,  $p < .001$ , Cohen's  $d = .41$ ). But their perceived status ( $t(596) = .36$ ,  $p = .72$ ) and length of stay ( $t(596) = .49$ ,  $p = .63$ ) did not differ.

Five participants recalled a purchase that was not consistent with the instruction they were given (e.g., in the material purchase condition but they recalled a prosocial purchase). Thus, we excluded them from further analysis. As a result, the effective sample size of Study 2 was 593. An analysis of variance (ANOVA) with purchase type as the independent variable and amount of money spent as the dependent variable revealed that purchase value did not differ across purchase types ( $F(2, 590) = .13$ ,  $p = .88$ ). The same applied to perceived social status ( $F(2, 590) = 1.36$ ,  $p = .26$ ) and length of stay ( $F(2, 590) = .21$ ,  $p = .81$ ).

*SWB.* We tested the impact of our experimental conditions on SWB using a 2×3 ANCOVA with happiness as the dependent variable, sense-of-belonging manipulation and purchase type as the independent variables, and length of stay, age, perceived social status, and sex as covariates. Sense-of-belonging manipulation had a main effect on happiness:  $F(1, 597) = 34.56$ ,  $p < .001$ ,  $M_{\text{low}} = 6.92$ ,  $M_{\text{high}} = 7.18$ ,  $\eta^2 = .06$ , as did purchase type:  $F(2, 597) = 3.17$ ,  $p < .05$ ,  $\eta^2 = .01$ . A Tukey post hoc test revealed that, when compared to material purchases ( $M = 6.84$ ), both prosocial ( $M = 7.22$ ,  $p < .01$ ) and experiential purchases ( $M = 7.06$ ,  $p < .05$ )

made participants happier. More importantly, the interaction between sense-of-belonging manipulation and purchase type was also significant ( $F(2, 597) = 7.50, p = .001, \eta^2 = .03$ ). For participants in the low sense-of-belonging condition, happiness differed with purchase type:  $F(2, 296) = 7.39, p = .001, \eta^2 = .05$ . A Games–Howell post hoc test revealed that, when compared to material purchase ( $M = 6.37$ ), both prosocial ( $M = 7.48, p < .001$ ) and experiential purchases ( $M = 6.87, p < .05$ ) made participants happier. In addition, prosocial purchases made participants happier than experiential purchases ( $p < .01$ ). However, purchase type did not influence participants' happiness in the high sense-of-belonging condition ( $F(2, 300) = .77, p = .46$ ). To be complete, length of stay ( $F(1, 597) = 5.81, p < .05; \eta^2 = .01$ ), age ( $F(1, 597) = 6.55, p < .05; \eta^2 = .01$ ), and status ( $F(1, 597) = 70.40, p < .001; \eta^2 = .11$ ) also had a significant impact on international migrants' happiness (Figure 3).

**Figure 3.** International Migrants' Happiness Based on Experimental Conditions in Study 2



*Relatedness need satisfaction and beneficence.* We tested the impact of our experimental conditions on participants' relatedness need satisfaction or beneficence using 2×3 ANCOVAs, with participants' relatedness need satisfaction as the dependent variable, sense-

of-belonging manipulation and purchase type as the independent variables, and length of stay, age, perceived social status, and sex as covariates. Our sense-of-belonging manipulation had a main effect on participants' relatedness need satisfaction:  $F(1, 597) = 12.09, p = .001, M_{\text{low}} = 6.91, M_{\text{high}} = 7.34, \eta^2 = .02$ , as did purchase type:  $F(2, 597) = 7.38, p = .001, \eta^2 = .02$ . A Tukey post hoc test revealed that, when compared to material purchases ( $M = 6.87$ ), both prosocial ( $M = 7.39, p < .01$ ) and experiential purchases ( $M = 7.23, p < .01$ ) led to higher relatedness need satisfaction. More importantly, the interaction between sense-of-belonging condition and purchase type was also significant ( $F(2, 597) = 11.85, p < .001, \eta^2 = .04$ ). For participants in the low sense-of-belonging condition, relatedness need satisfaction differed with purchase type:  $F(2, 296) = 15.94, p < .001, \eta^2 = .10$ . A Games–Howell post hoc test revealed that, when compared to material purchases ( $M = 6.32$ ), both prosocial ( $M = 7.54, p < .01$ ) and experiential purchases ( $M = 7.05, p < .05$ ) led to higher relatedness need satisfaction. In addition, prosocial purchases led to higher relatedness need satisfaction than experiential purchases ( $p < .05$ ). However, purchase type did not influence relatedness need satisfaction for participants in the high sense-of-belonging condition ( $F(2, 300) = .67, p = .51$ ). To be complete, perceived social status ( $F(1, 597) = 44.47, p < .001; \eta^2 = .07$ ) also had a significant impact on international migrants' relatedness need satisfaction. No other variables had a significant effect.

To examine beneficence, a  $2 \times 3$  ANCOVA was carried out, with participants' beneficence as the dependent variable, sense-of-belonging manipulation and purchase type as the independent variables, and length of stay, age, perceived social status, and sex as covariates. Our sense-of-belonging manipulation did not influence participants' beneficence:  $F(1, 597) = .07, p = .79$ . However, purchase type had a main effect on beneficence:  $F(2, 597) = 6.69, p = .001, \eta^2 = .02$ . A Tukey post hoc test revealed that prosocial purchases ( $M = 7.24$ ) led to higher beneficence than both experiential ( $M = 6.81, p < .01$ ) and material purchases ( $M =$

6.79,  $p < .01$ ), with no difference between the two latter types ( $p = .93$ ). The interaction between sense-of-belonging manipulation and purchase type was not significant ( $F(2, 597) = .01, p = .99$ ). To be complete, perceived social status ( $F(1, 597) = 52.91, p < .001; \eta^2 = .08$ ) also had a significant impact on beneficence. No other variables had a significant effect.

*The independent contribution of beneficence to SWB.* We argue that prosocial purchases can positively influence SWB via both relatedness need satisfaction and beneficence. Following Martela and Ryan (2016a), we used a hierarchical regression analysis to test the independent contribution of beneficence to SWB (Table 1). In the regression, happiness was entered as the dependent variable. In step 1, the dependent variable was regressed on the three measures of need satisfaction (autonomy, relatedness, and competence), with the beneficence score entered in step 2. We found the model for step 1 was significant:  $F(3, 592) = 139.24, p < .001, R^2 = .41$ . In step 2, when beneficence was incorporated, the model was also significant:  $F(3, 592) = 123.13, p < .001, R^2 = .45$ . The change in total variance explained ( $R^2$  change) was statistically significant:  $F(1, 593) = 44.34, p < .001$ . Thus, these results suggest that the impact of beneficence on SWB is different from the impact of psychological need satisfaction. Furthermore, adding beneficence into the model can significantly increase model predictability.



**Table 1.** Hierarchical Regression Results on the Independent Contribution of Beneficence Satisfaction (Study 2)

	<b>Model 1</b>		<b>Model 2</b>	
<b>Variable</b>	<b>Happiness</b>		<b>Happiness</b>	
Autonomy	.27	***	.22	***
Relatedness	.25	***	.18	**
Competence	.21	***	.11	*
Beneficence			.29	***
Overall R <sup>2</sup>	.41	***	.45	***

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

To provide further evidence of the independent contribution of beneficence to SWB, we followed Martela and Ryan (2016a) by testing whether satisfaction of the three basic needs (autonomy, relatedness, and competence) would fully mediate the relation between beneficence and SWB. To do this, we conducted three separate double-mediation analyses (Hayes PROCESS Model 6) with happiness as the dependent variable, purchase type as the independent variable, and beneficence and one of the psychological needs (autonomy, relatedness, competence) as the mediator. The analysis showed the paths from beneficence to happiness via the three basic needs were each significant (autonomy:  $b = .0752$ , 95% CI = .0287, .1294; relatedness:  $b = .0545$ , 95% CI = .0192, .0981; competence:  $b = .0651$ , 95% CI = .0226, .1172). The direct paths from beneficence to happiness remained significant in all situations (autonomy:  $b = .1137$ , 95% CI = .0438, .1971; relatedness:  $b = .1344$ , 95% CI = .0502, .2239; competence:  $b = .1238$ , 95% CI = .0452, .2123), providing further evidence that beneficence satisfaction can independently contribute to SWB.

### *Study 2 Discussion*

By directly manipulating purchase type, Study 2 suggests that prosocial purchases are more effective than experiential purchases in increasing international migrants' SWB in the low sense-of-belonging condition. This is mainly because prosocial purchases lead to both relatedness need satisfaction and beneficence, with each independently contributing to SWB.

## **GENERAL DISCUSSION**

With the rising levels of anti-immigration rhetoric in the public and the media and recent gains by anti-immigration political parties in many countries, international migrants' SWB has become a matter of more intensive and urgent concern (Ford-Paz et al., 2020; Thomas, 2020; Tummala-Narra, 2020). Our studies demonstrate that coping with psychological threats such as a lack of a sense of belonging in the host country makes international migrants spend money suboptimally: more on material purchases but less on experiential and prosocial purchases. More importantly, our results suggest that prosocial purchases are more effective than experiential purchases in increasing international migrants' SWB. This is because prosocial purchases can lead to both relatedness need satisfaction and beneficence, with each independently contributing to international migrants' SWB. These results have important theoretical and practical implications.

### *Theoretical Implications*

Our results make contributions to the following literature streams: international migrants' SWB, consumer spending research, and acculturative stress research. In terms of international migrants' SWB literature, existing studies generally focus on whether economic gains in the host country can make international migrants happier, but the results are inconclusive (de Vroome & Hooghe 2014; Stillman et al., 2015). However, Berry et al. (1987) found feeling marginalized in the host country was the biggest stressor facing international migrants, while Mena et al. (1987) reported that feeling like an outsider caused the most stress when adapting

to a new cultural environment. But the existing literature on international migrants' SWB provides little insights into how international migrants establish and maintain ties with the mainstream culture and its implications for their SWB. By focusing on how international migrants spend money to reduce their lack of a sense of belonging in the host country, a key contribution of our research is that it provides rare insights into how psychological threats may make international migrants spend money suboptimally and the implications for their SWB. Our research suggests that focusing monetary gains alone may provide an incomplete understanding of international migrants' SWB because acculturation is a stressful experience. Therefore, consistent with Diener et al. (2018), our research highlights the importance of the fulfillment (or lack thereof) of basic psychological needs in understanding international migrants' SWB.

In terms of the consumer spending literature, existing studies focus on two separate research streams: material vs. experiential purchases (Gilovich et al., 2015) and prosocial spending (Aknin et al., 2018). The former suggests that experiential purchases can make people happier because they can fulfill their psychological need for relatedness (Kumar & Gilovich, 2015), build social bonds with audiences (Van Boven et al., 2010), and are less susceptible to social comparisons (Carter & Gilovich, 2010). The prosocial spending literature points out that people become happier if they spend money on others rather than spending the same amount of money on themselves (Dunn et al., 2008). This is because prosocial purchases can satisfy the psychological need for relatedness (Aknin et al. 2013) and lead to beneficence and enhanced meaningfulness in life (Martela & Ryan, 2016a; Martela et al., 2018). However, an important gap in the consumer spending literature is that no previous research has compared experiential purchases and prosocial spending to see how international migrants should spend their money to enhance their SWB. Our research fills this gap. Our results consistently demonstrate prosocial spending to be more effective than experiential purchases in increasing

migrants' SWB. This is mainly because both experiential purchases and prosocial spending can lead to relatedness need satisfaction. However, beneficence associated with prosocial spending can improve well-being and meaning in life without actual contact with the beneficiary (Martela & Ryan 2016a, 2016b; Martela et al., 2018); it can independently contribute to migrants' SWB. Therefore, our paper not only documents the superiority of prosocial purchases but also reveals the key mechanisms behind that superiority.

In terms of the acculturative stress literature, previous research has repeatedly demonstrated that moving to a new cultural environment is stressful (Berry et al., 1987), but it concentrates largely on using social support and professional advice to reduce acculturative stress (Mena et al., 1987). Thus, an important gap in this literature is that it provides little insight into how international migrants use consumption to reduce acculturative stress. Chakraborty and Chattaraman (2021) provide rare and valuable insights into this issue. Their research found that first-generation Indian Americans used ethnic symbols such as eating Indian food to reduce acculturative stress. However, they focus solely on reaffirming ethnic identity in a new cultural environment. Our research complements their scholarship by providing unique insights into how consumption can be used to establish and maintain ties with the mainstream culture and relevant implications for international migrants' SWB. Our experimental results have consistently demonstrated that international migrants prefer spending money on material purchases to cope with their lack of sense of belonging. Our results also suggest that prosocial purchases are more effective than experiential purchases in increasing international migrants' SWB. This has important practical implications that are discussed in detail in the next section.

### *Practical Implications*

Our research has important practical implications. In terms of branding, when targeting at international migrants, marketing managers can emphasize the brand is indispensable to, and symbolic of, the American way of life. This can make it appealing to international migrants by making them feel connect to the mainstream culture in the USA. Alternatively, marketing managers can establish various brand communities (e.g., online community center, dedicated Facebook pages) to make international migrants feel more connected to others. In terms of cause-related marketing, our research suggests, to appeal to international migrant consumers, marketing managers can use other-benefit appeal such as “Your donation will save the lives of those suffering from hunger”. More importantly, marketing managers need to offer migrant consumers the opportunity to learn about the positive impact of their purchase on others. This can increase their cause appeal by enhancing beneficence.

Our research also has important policy implications. Currently, objective indicators such as income dominate policy measurements of migrants’ welfare. However, researchers have begun to call for policymakers to pay greater attention to migrants’ SWB, because seeking a better and happier life is the main reason behind their decision to migrate (Hendriks, 2015). By focusing on how international migrants spend money to cope with their lack of a sense of belonging in the host country, our research offers two unique policy insights: first, it suggests that the psychological threats international migrants face when moving to a new country can have negative implications for their SWB. Indeed, isolation and social exclusion are their biggest challenges in the acculturation process (Migration Forum, 2015). Thus, focusing on migrants’ economic gains alone cannot provide a complete understanding of their SWB. Instead, public policymakers need to consider how to help migrants fulfill their basic psychological needs and thus positively contribute to their SWB. Second, our research suggests that prosocial spending is more effective than experiential purchase in enhancing migrants’ SWB. Thus, policymakers can consider using different ways to encourage migrants

to spend money on others rather than themselves. This can satisfy their need for relatedness by establishing connections with others in their local communities. In addition, the satisfaction from being able to give is also rewarding, because it can independently contribute to international migrants' SWB.

### *Limitations and Future Research*

Although our research has important theoretical and public policy implications, any conclusions should be treated with caution because of the following limitations. First, our participants are mainly middle-class migrants, with most having an annual income between \$37,951 and \$91,900. However, Lee et al. (2018) have recently argued that lower-income consumers are happier or at least equally happy with their material and experiential purchases due to concerns about the wise use of their limited financial resources. Thus, future research could replicate our studies on migrants in lower socioeconomic strata (e.g. refugees) to see whether our results continue to hold. Second, in this paper, we focus on long-term international migrants, defined as those staying in the host country for at least 12 months. But Vredeveld and Coulter (2019) demonstrate that sojourners may have unique cultural experiential goals when visiting or temporarily moving to another country. Thus, future research might explore whether prosocial spending is still the most effective way to increase migrants' SWB when they have different cultural experiential goals. Third, our studies suggest that prosocial purchases are more effective than experiential ones in satisfying migrants' need for relatedness. This may be because about 70% of the prosocial purchases that participants recalled related to buying gifts for their families, colleagues, loved ones, and friends. However, prosocial spending also includes donations to charities that support people beyond one's immediate social circle or local community. Thus, whether prosocial spending in the context of charity donation is still the most effective way to increase migrants' SWB awaits future research. Fourth, across our studies, the effect sizes of spending on migrants'

SWB tend to be small to medium. Thus, significantly improving international migrants' SWB may require collective efforts across multiple disciplines, such as marketing, psychology, and social policy. Fifth, our experiments only measured participants' stated preferences toward various hypothetical spending decisions. Thus, whether our results can be generalized to real-world and/or long-term behavior needs further study. Sixth, previous research suggests that international migrants' cultural background has a significant impact on their SWB (Hajdu & Hajdu, 2016; Rice & Steele, 2004; Voicu & Vasile, 2014). However, our two experiments did not collect information about participants' cultural heritage. Thus, future research can explore how culture may influence migrants' spending decisions and implications for their SWB. Seventh, international migrants' consumption can be influenced by their status in the host country (e.g., citizenship) and original country of residence. Our studies did not measure these variables, but future research can explore them in detail. Finally, COVID 19 has resulted in a paradigm shift in consumer behavior and most of them prefer online channels these days (Gordon-Wilson, 2022; Milakovic, 2021; Nayal et al., 2021; Rayburn et al., 2022; Sheth, 2020; Yap et.al., 2021). This, therefore, suggests digital technologies are increasingly important for consumers to shop and communicate. Thus, an exciting opportunity awaits future research is to explore the impact of digitalization on international migrants' SWB both during and after the covid-19 pandemic. For example, on the one side, digital technologies make it easier for international migrants to communicate with their families and friends during the Covid-19 crisis (Sheth, 2020), enhancing their SWB. On the other side, excessive use of digital technologies can exacerbate feelings of depression and isolation (Yap et.al., 2021), reducing international migrants' SWB. Thus, future studies need to exam both the benefits and risks of digitalization to provide a balanced view on international migrants' SWB both during and after Covid-19 crisis.

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**APPENDIX****SUMMARY STATISTICS ACROSS STUDIES**

<b>STUDY 1</b>			<b>STUDY 2</b>		
<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Variable</b>	<b>Mean</b>	<b>SD</b>
SWB	6.85	1.82	SWB	7.08	1.47
Experiential vs. material	0.94	2.8	Autonomy	7.04	1.27
Prosocial vs. material	0.82	2.77	Relatedness	7.17	1.43
Materialism	6.13	1.47	Competence	7.32	1.23
Perceived financial safety	5.37	2.15	Beneficence	6.95	1.35
Length of stay	7.84	2.92	Subjective status	6.16	1.77
Age	30.61	6.57	Length of stay	6.25	6.54
			Age	30.67	6.72