Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Beyond Mere Surviving: The role of host country support and gratitude in thriving during the pandemic

Jing Hua a, Lu Zheng b,*, Alan Walker c, Ian Mercer d, Jiayi Liu e

a Department of Management and HRM, Sorrell College of Business, Troy University, Troy, AL, 36081, USA
b School of Management, Huazhong University of Science and Technology, A30047 Wuhan, PR China
c Harbert College of Business, Department of Management, Auburn University, Auburn, AL, USA
d Silberman College of Business, Fairleigh Dickinson University, 1000 River Rd, Teaneck, NJ 07666, USA
e Department of Psychological Sciences, Auburn University, 102A Thach Hall, Auburn, AL 36849, USA

ARTICLE INFO

Keywords:
Thriving
Sojourners
COVID-19
Host country support
Gratitude
Ethnocentrism

ABSTRACT

While the ensuing COVID-19 pandemic has significantly altered individuals’ lives worldwide, it has been perhaps especially disruptive to the lives of sojourners as many have been unable to return home and are absent from their families, a familiar culture, and normal social support systems. While it is important to ask how such individuals can successfully survive in such a crisis, we were interested in extending our knowledge and understanding by asking “how can such individuals move beyond mere surviving to a state of thriving?” In answering this question, we utilized a positive psychology framework to develop a theoretical model wherein we expected higher/lower levels of perceived social support from host country people (i.e., host country support) to result in higher/lower levels of perceived gratitude, which would then result in higher/lower levels of thriving, and ethnocentrism moderated this indirect effect. To test our model, we utilized a sample of sojourners who responded to a survey measuring ethnocentrism (February 2020). We then administered daily surveys measuring perceived host country support, gratitude, and thriving over a nine-day period during the COVID-19 crisis (March 26–April 3, 2020). Results supported the indirect effect of host country support on thriving via gratitude. Further, we found that sojourners with lower levels of ethnocentrism exhibited stronger host country support-gratitude link, hence stronger indirect effect of host country support on thriving via gratitude. We close by offering implications for the existing literature, future research, and organizational practices.

Beginning after World War II, psychology became a science that mainly focused on addressing human pathology, weakness, and general psychological disorders such as anxiety or depression (Seligman & Csikszentmihalyi, 2000). The general clinical models and research paradigms were focused on how to engender individual-level changes from a state of psychological “illness” to a state of “psychological health.” However, beginning around 1998, Martin Seligman began to see the need to move beyond models focused on moving individuals from a state of mental illness and maladaptive behavior to a state of mere psychological health. Instead, he envisioned moving otherwise psychologically healthy individuals to a state of thriving and living life to the fullest. Thus, positive psychology’s mission is to better understand and foster thriving in individuals, families, and communities (Seligman &...
people in other cultures. Ethnocentrism could influence sojourners’ group (Black, 1990). That is, individuals with high ethnocentrism think that their culture is superior and may distinguish oneself from others.

Thriving is gratitude, which refers to the joint experience of vitality and learning (Spreitzer et al., 2005). It connotes growth and prosperity (Feeney & Collins, 2015) and has been found to predict self-development (Paterson et al., 2014) as well as health, burnout, and task performance (Kleine et al., 2019; Porath et al., 2012) to name a few. While thriving represents a key construct from a positive psychological framework, scarce research has been conducted to date on thriving in the sojourner literature (Ren et al., 2014; Ren et al., 2015).

The term “sojourner” refers to individuals (e.g., expatriates, international students, and visiting scholars) who temporarily re-locate abroad (Church, 1982). Thriving would appear to be a relevant concept to sojourners’ experience, perhaps even more so during the pandemic, as thriving represents a vibrant and meaningful life (Ren et al., 2015). The key motivation for sojourners to take an overseas assignment is to recharge, challenge, and develop themselves (Chen et al., 2010). Or, in other words, to enhance their personal growth and to actively move forward toward one’s full potential. Sojourners, like all other individuals, ultimately desire to not only survive, but thrive – even during a pandemic (Feeney & Collins, 2015).

While all our lives have been significantly altered by the pandemic, the lives of sojourners have been perhaps even more significantly disrupted due to the difficulties of traveling back home, being absent from family and a familiar culture, and being separated from normal social support systems (Chikaonda, 2021; Diegoac2, 2021; Hernandez, 2021). Further, many sojourners have experienced an unwelcoming attitude from their host country. For example, here in the U.S., Asians, and especially Chinese, have experienced discrimination and prejudice during their daily interactions as well as on social media (Lee & Yadav, 2020). These individuals have been spat on, yelled at, and even physically attacked in the U.S. and this phenomenon does not seem to be abating soon (Tavernise & Oppel, 2020). An important question to ask then is “how can otherwise psychologically-healthy sojourners not only survive, but thrive during this crisis?”

Fortunately, some organizations in the host countries have implemented initiatives demonstrating an understanding of threats that sojourners face and have become willing to provide needed support. For example, U.S. colleges are using remote ESL help and counseling services to support their international students through the pandemic (Durrani, 2020) and there are several social media campaigns aimed at supporting Asians in the local community (Shen-Berro, 2020). Additionally, the beneficial effect of host country support on sojourner’s adjustment has been identified in the literature (Bhaskar-Shriniwas et al., 2004; Takeuchi et al., 2009). Thus, one question we sought to answer is “can host country support help sojourners to continue to thrive during the pandemic, and, if so, how?”

According to the theoretical model of thriving through relationships (Feeney & Collins, 2015), social support is viewed as a critical factor in boosting individuals’ thriving, and emotional states are important mechanisms linking social support to thriving. Negative emotions especially fear, anxiety, or uneasiness are rampaging during the pandemic period (Ren et al., 2020). It is critical to help sojourners reduce these negative emotions. Consistent with the positive psychology movement (Seligman & Csikszentmihalyi, 2000), we argued that sojourners should cultivate positive emotions (e.g., gratitude, happiness, and joy) to keep thriving during pandemic. The study of positive emotions has developed during the past decade (Fredrickson, 2003). Instead of serving as a mere pleasant distraction, positive emotions are viewed as active agents and critical ingredients to thriving – even when facing adversity (Fredrickson et al., 2003).

We believe that the most relevant positive emotion underlying the social support thriving relationship between social support and thriving is gratitude, which refers “a positive emotion that is experienced when an individual perceives that someone has intentionally given them a valued benefit” (Tsang, 2006, p. 157). In this paper, combining Feeney and Collins’ (2015) theoretical model, the dual function framework of gratitude (Kubacka et al., Keijser, 2011), and the broaden-and-build theory of positive emotions (Fredrickson, 1998; 2001), we highlight the mediating role of gratitude between social support received from people in the host country (i.e., host country support) and sojourners’ thriving during COVID-19 crisis. Specifically, social support provided by people in the host country should elicit sojourners’ feeling of gratitude, which, in turn, promotes sojourners’ thriving.

In order to promote thriving, supporters or helpers must be sensitive and responsive to the recipient’s goals, needs, and preferences (Feeney & Collins, 2015). That is, only when the recipients perceive the social support they received from other people in the host country as responsive, thoughtful, and valuable, they would experience thriving. Sojourners’ ethnocentrism may shape the way they perceive and respond to the support provided by people in the host country. Ethnocentrism refers to a bias toward one’s own cultural group (Black, 1990). That is, individuals with high ethnocentrism think that their culture is superior and may distinguish oneself from people in other cultures. Ethnocentrism could influence sojourners’ perceptions of behavior exhibited by others from a different cultural group.

![Fig. 1. The Hypothesized Model. Note. For parsimony, control variables are not included in this figure.](image-url)
culture (Shaffer et al., 2006) and affect sojourners’ gratitude toward host country support (Caligiuri et al., 2016). Accordingly, as foreigners, sojourners with higher ethnocentrism may have more negative perceptions of the support received from other people in the host country, and thus would be less likely to feel thriving. Therefore, one of the objectives we sought to achieve was to identify possible boundary conditions (i.e., ethnocentrism) in the relationships between host country support and thriving as mediated by the positive emotion of gratitude. We present our theoretical model in Fig. 1.

Because the pandemic likely had a fluctuating impact on sojourners’ moods and behaviors (and we were interested in how host country support might promote sojourners’ thriving), we believed it was essential to capture this fluctuation on a daily basis. We, therefore, conducted a 9-day diary study during the initial days of the COVID-19 pandemic. We list several significant events (Fig. 2) that happened during our daily data collection period (March 26–April 3, 2020) to illustrate specific incidences of prejudice and abhorrent behavior sojourners experienced during this timeframe. We believe that focusing on this unique period provides novel insights into how sojourners might thrive while also facing adversity.

Theory and hypotheses

Daily host country support and thriving

As the concept of social support emerged from the stress and coping literature, scholars have traditionally viewed social support as a buffer to stress (Cohen & Wills, 1985; House, 1981). Yet, positive psychologists suggest that this perspective underscores the potentials of social support (Ehrhardt & Ragins, 2019). Social support may predict a series of positive outcomes not related to stress, such as personal growth, citizenship behaviors, and general well-being (Brewin et al., 2000; Colbert et al., 2016; Dutton & Heaphy, 2003; Fredrickson, 2003; Ryff & Singer, 2000). Specifically, Feeney and Collins (2015) have proposed that social support is fundamental to thriving in life when facing adversity.

Taking a positive psychology perspective, we were interested in whether host country support could help sojourners thrive during COVID-19. Host country support may include the support from the foreign facility and people from the local community. When sojourners enter a new country, the social support they counted on in the home country are no longer exist or relevant (Black et al., 1991). There is a strong need for the sojourners to seek social support from people or organizations in the host country to reduce their uncertainty (Farh et al., 2010). During the COVID-19, while sojourners were thrown into a situation involving threats to physical safety, loneliness, and social isolation, sojourners’ need for host country support may increase consistently (Farh et al., 2010). Previous sojourner scholars tend to adopt a stress perspective to view host country support on sojourners experience (Kraimer et al., 2001; Takeuchi, 2010), we adopted the positive perspective. Specifically, we viewed host country support as critical to sojourners thriving even during the pandemic as positive relationships could provide a vital component for growth and development (Dutton & Heaphy, 2003; Spreitzer et al., 2005).

Host country support can involve relatively minor acts such as listening to sojourners’ thoughts and emotions, showing sympathy and compassion, or offering comfort, all of which may provide a welcomed refuge to stressed individuals and offer a sense of relief, security, and even thriving (Bowlby, 1988; Collins & Feeney, 2000; Feeney & Collins, 2004). The support may come from foreign facility that host the sojourners (Kraimer & Wayne, 2004) or anyone who has sympathy toward the sojourners in the local community (Farh et al., 2010). According to Feeney and Collins (2015), social support could help individuals to thrive during times of adversity – much as an abandoned child who gets adopted into a nurturing family might.

However, during the COVID-19 pandemic, sojourners specific situations likely fluctuated day-by-day, along with their daily needs. Likewise, host country support may also have fluctuated daily. Further, previous research has confirmed that social support and thriving can fluctuate within-individuals (Ford et al., 2012). Therefore, we propose the following hypothesis.

**Hypothesis 1.** daily host country support will be associated with daily thriving.

The mediating effect of gratitude in social support’s effect on thriving

One of the pathways to thriving through social support is by means of the positive emotion of gratitude (Feeney & Collins, 2015).
The affective state of gratitude arises when the beneficiary perceives that the benefactor has intentionally acted to improve the beneficiary’s well-being (Emmons & McCullough, 2003; Fredrickson, 2004; Lazarus, 1991). Even though previous research tends to associate negative emotions with adversity and ignore the positive emotions (Feeney & Collins, 2015), gratitude is fundamental to post-traumatic growth (Wood et al., 2010). For example, after the September 11th attacks, individuals who experienced gratitude learned constructive things from the crisis, became more optimistic, and made statements such as “I learned that most people in the world are inherently good” (Fredrickson et al., 2003).

To further illustrate the mediating role of gratitude, we incorporate the dual function framework of gratitude (Kubacka et al., 2011) as well as the broaden-and-build theory of positive emotions (Fredrickson, 1998; 2001). According to Kubacka et al. (2011), gratitude not only serves as a detector that alerts people of the benefits received (the detecting function) but also serves as a motivator for people to engage in relationship maintenance behaviors (the motivating function). As for the detection function, the feeling of gratitude is determined by cognitive appraisals of the social support provided by others. Tesser et al. (1968) found that manipulating participants’ appraisals of value, cost, and genuineness of the social support increased their emotion of gratitude. Similarly, Wood et al. (2008) found that positive appraisals of support were positively associated with the feeling of gratitude. Thus, people are likely to experience gratitude when they perceive that others’ help or support is responsive, thoughtful, and valuable (Algoe et al., 2008; Kubacka et al., 2011). During the pandemic, sojourners were likely to be in urgent need of help and support from their networks, including local friends and host country contacts. Further, sojourners would also likely interpret host country support as responsive and thoughtful. Such appraisals would, in turn, likely help sojourners appreciate the social support received. Accordingly, we expected daily host country support to be positively associated with gratitude.

We expand the motivating function of gratitude to self-development behaviors, consistent with the broaden-and-build theory of positive emotions (Fredrickson, 1998; 2001). According to Fredrickson (1998; 2001), gratitude broadens individuals’ momentary thought-action repertoires. The broadened thought-action repertoires then motivate people to broaden attention and thinking, to strengthen social bonds, and to continue progression towards goals (Fredrickson & Levenson, 1998). Studies have empirically supported the association between gratitude and well-being, including personal growth, positive relationships, optimism, and sleep quality (Emmons & McCullough, 2003; Wood, Joseph, et al., 2009; Wood, Froh, et al., 2010).

We expected that experiencing positive emotions would facilitate not only psychological health, but further promote participants’ transformation into more resilient and socially integrated individuals (Fredrickson, 2004). In other words, we believed that grateful sojourners would be motivated to see the dark cloud’s silver lining, reach out to old and new connections for help, and keep growing. Hence, we argue that gratitude is a human strength helping sojourners thrive from the COVID-19 pandemic. Taken together, we predict:

**Hypothesis 2.** Daily Gratitude will mediate the relationship between daily host country support and thriving.

**The moderating role of ethnocentrism**

Gratitude served as a detector of support-givers’ unselfish intentions, responsiveness, and efforts (Kubacka et al., 2011; Wood et al., 2008). Sojourners’ feeling of gratitude is determined by positive appraisals of the social support provided by host country people. Wood et al. (2008) found that certain traits or interpretive biases influenced the cognitive appraisal process of support or help received by benefactors, and thus affected the beneficiary’s tendency to experience gratitude. In the present research, we propose that ethnocentrism represents an individual difference variable that is likely to capture the interpretive biases of sojourners. Previous research shows that people tend to interpret others’ behavior in accord with their self-identity (e.g., Markus, 1977; Wood et al., 2008). Social identity theory suggests that people categorize themselves into groups based on salient identity characteristics (e.g., nationality and race) (Hogg & Turner, 1987; Tajfel, 1982). People feel more trustworthy toward those who share the same identity features, and have a more negative attitude toward outgroups (Ashforth & Mael, 1989; Hogg & Terry, 2000; Tajfel, 1978).

During the pandemic, we expected sojourners with high ethnocentrism to be more likely to engage in “us versus them” categorization, leading to characteristic appraisal biases regarding the support or help provided by outgroups. They may perceive that host country contacts provided support out of hidden or malevolent intentions instead of genuine and benevolent intentions, and hence be less likely to feel grateful. In contrast, sojourners with low levels of ethnocentrism may be less likely to harbor negative prejudice of such support. Therefore, they may be less likely to make negative cognitive appraisals of the social support received. We thus hypothesized that:

**Hypothesis 3.** Ethnocentrism would moderate the relationship between daily host country support and gratitude such that the relationship is weaker when ethnocentrism is high compared to when ethnocentrism is low.

**Method**

**Sample and procedures**

Participants consisted of sojourners (international students, exchange scholars, & foreign-born workers) either studying or working at a large Southeastern university in the U.S. The study consisted of two phases. In phase one (the first week in February 2020), participants (n = 91) were asked to complete a one-time online survey that measured demographic information (i.e., country of origin, gender, age, time stayed in the U.S.), ethnocentrism, and thriving.

In the second phase (March 26–April 3, 2020), when COVID-19 became more widespread in the U.S., participants were asked to
complete daily surveys that measured host country support, gratitude, and thriving for nine consecutive days. Those who completed all the daily surveys got a $20 cash reward.

Of the 91 individuals who completed the phase one survey, 18 did not participate in at least three (of nine) daily surveys and were subsequently removed (Singer & Willett, 2003). This resulted in a final sample of 73 (53.4% male; \( M_{\text{age}} = 23.01, SD = 4.34; M_{\text{months stayed in the U.S.}} = 24.76, SD = 20.32; 80\% \text{ response rate} ) who contributed to all nine days of data collection, resulting in 657 daily responses. Among the 73 participants, 38 (52.1\%) were from China, 12 (16.5\%) from Vietnam, 9 (12.3\%) from Nepal, and 5 (6.8\%) from Malaysia. Others were from South Korea, India, Saudi Arabia, Nigeria, South Africa, and Germany.

Measures

Ohly et al. (2010) recommended that the dairy study should use abbreviated scales because even good-natured participants were unwilling to spend too much time each day in repeatedly responding to the same questions over a period. Therefore, we used abbreviated scales for our daily survey measures to encourage participation for our daily survey measures (Ohly et al., 2010). We also modified negatively-worded items as our participants were sojourners and English was not their native language. To maintain the validity of our scales we utilized items that assessed the main concepts being measured (Fisher & To, 2012).

Daily host country support

We adopted the Survey of Perceived Organizational Support (Eisenberger et al., 1986) to measure host country support. Participants rated two items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The two items were “Today, I felt the University cares about me.” And “Today, I felt my friends in the U.S. care about me.” The average Cronbach’s alpha reliability for nine days was.78.

Daily gratitude

We adopted and modified two items from the Gratitude Questionnaire–6 (McCullough et al., 2002) to measure daily fluctuations in gratitude. The two items were “Today, I have so much in life to be thankful for.” And “Today, I am thankful to a wide variety of people.” Participants rated each item on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The average alpha across nine days was.92.

Daily thriving

We adopted two items each from the Learning and Vitality sub-dimensions of the 10-item Thriving Scale (Porath et al., 2012). Sample items were “Today, I see myself continually improving.” And “Today, I feel alive and vital.” Participants rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The average alpha across nine days was.91.

Ethnocentrism

We used four items in Shaffer et al.’s (2006) scale to measure ethnocentrism. Participants rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item was “my country should be the role model for other countries.” The Cronbach’s alpha reliability was.84.

Control variables

When examining mediating effects, the direction of mediation must be supported by theory and account for covarying variables that may contribute to outcome variables (Judd & Kenny, 2010). We thus controlled for participants’ thriving the previous day/time, since the previous days’ thriving likely predicted individuals’ thriving the next day. That is, the thriving measured at Time 1 was modeled to predict gratitude and thriving at Day 1; the thriving measured at Day 1 was modeled to predict gratitude and thriving at Day 2, and so on. The same four items in Porath et al.’s (2012) scale was used to measure thriving at Time 1 and the alpha was.66. We also controlled for the social support received from their home country, which is an important factor contributing to thriving. We adopted the survey of perceived organizational support (Eisenberger et al., 1986) to measure home country support. Items for home country support were “Today, I felt my family cares about me.” And “Today, I felt friends from my home country cares about me.” The average alpha across nine days was.80. We also controlled for the demographic factors of age, gender, and time stayed in the U.S.\(^1\)

\(^1\) Country of origin was not added as the control variable because (1) the number of sojourners from different countries distributed unequally, ranging from 1 to 38, (2) focal variables including ethnocentrism, host country support, gratitude, and thriving did not differ across countries. The results of group-level comparisons across countries are included in the online supplemental document. Specifically, Table S1, Table S2, Table S3, and Table S4 are for the results of ethnocentrism, host country support, gratitude and thriving, respectively.
Analytical strategies

We first conducted a multilevel confirmatory factor analysis (MCFA) with Mplus 8 (Muthén & Muthén, 2012–2017) to evaluate the factor structure of our variables. The between-individual CFA was a five-factor measurement model (i.e., host country support, home country support, gratitude, thriving, and ethnocentrism) and the within-individual CFA was a four-factor measurement model (i.e., host country support, home country support, gratitude, and thriving).

Following other researchers’ endeavors (Hofmann, 1997; Schilpzand, Houston, & Cho, 2018), we estimated a null model (Model 0) for daily variables (i.e., host country support, home country support, gratitude, and thriving) without any predictors added to partition each daily variable’s variance into within-individual and between-individual components, as well as the intra-class correlation coefficients (ICC [1]). Significant within-individual variance indicates a variable does fluctuate on a day-to-day basis or vary at the within-individual level. In other words, this variable varies rather than remains stable across days. Significant between-individual variance indicates a variable differs among different participants with some participants have higher values than others. Intra-class correlation coefficients (ICC [1]) represent the proportion of between-individual variance in the daily variables (i.e., host country support, gratitude, and thriving). The ICC should be sufficient high to justify the appropriate use of multilevel modeling (Hofmann, Griffin, & Gavin, 2000; LeBreton & Senter, 2008).

We conducted three multilevel path analyses with Mplus 8 (Muthén & Muthén, 2012–2017) to test our hypotheses. Following the recommendations of prior researchers (e.g., Hofmann, 1997; Hofmann et al., 2000; Ohly et al., 2010), we person-mean centered all within-individual predictors (i.e., variables were centered at each participant’s mean across days) to obtain a pure examination of within-individual effects, and grand-mean centered between-individual variables (i.e., variables were centered at the sample mean) to facilitate interpretation. After controlling for thriving the previous day/time, home country support and between-individual controls (gender, age, and time stayed in the U.S.), we first examined a within-individual main effect model (denoted as Model 1) to test how daily host country support related to daily thriving (Hypothesis 1). We then examined a within-individual mediation model (denoted as Model 2) to test whether the daily gratitude mediated the daily relationship between daily host country support and thriving (Hypothesis 2). For both Model 1 and Model 2, similar to previous studies (e.g., Foulk, Lanaj, Tu, Erez, & Archambeau, 2018; Lin, Savani, & Ilies, 2019), the hypothesized within-individual paths were modeled with random slopes (i.e., different individuals have different slopes), and the within-individual controls (i.e., previous thriving, home country support) were modeled with fixed slopes (i.e., different individuals have the same slope). We used parametric bootstrapping to estimate the significance of the mediating effect (Hypothesis 2) and generated confidence intervals based on Monte Carlo simulations with 20,000 replications (e.g., Preacher, Zyphur, & Zhang, 2010; Selig & Preacher, 2008).

Finally, we specified a cross-level interaction model (denoted as Model 3) to test the cross-level moderation effects of ethnocentrism on the daily relationships between host country support and gratitude (Hypothesis 3). Built on Model 2, we further regressed the slopes of the daily relationship between host-country support and gratitude on ethnocentrism. After confirming this moderation, we conducted simple slope analyses and plotted the moderating effect (Preacher et al., 2006). To provide further insight on the practical significance of the focal effects, we also computed pseudo-$R^2$ (Snijders & Bosker, 1999), which indicated the amount of variance in the outcome variables explained by the focal within-individual variables, following the suggestions by Hofmann et al. (2000).

Results

The MCFA model fits well, with $\chi^2(94) = 157.40, p < .01, \text{CFI} = 0.97, \text{TLI} = 0.96, \text{RMSEA} = 0.03, \text{SRMR}_{\text{within}} = 0.03, \text{SRMR}_{\text{between}} = 0.08$. All items loaded on their respective constructs significantly at 0.05 level with acceptable factor loadings larger than 0.40. The null model showed that a significant percentage of the total variance in all focal variables (i.e., host country support, gratitude, and thriving) was attributable to individual variation at the daily level (see Table 1). Specifically, 22.5% of the variance in daily host country support, 29.3% of the variance in daily gratitude, and 31.3% of the variance in daily thriving resided at the within-person level, respectively. Table 1 showed that ICCs were quite high (0.69–0.77), and hence multilevel modeling was appropriate.

Table 2 shows within- and between-individual correlations and descriptive statistics for all study variables. The within-individual correlations were computed only for within-level variables. Means of within-individual variables were calculated across nine days for each participant. The between-person correlations were then computed among the aggregated means of daily variables and between-level variables (gender, age, and time stayed in the U.S.). We found at both the within-individual level and between-individual level, host country support was significantly associated with gratitude ($r_{\text{within}} = -0.48, p < .01; r_{\text{between}} = -0.57, p < .01$); and gratitude was significantly associated with thriving ($r_{\text{within}} = 0.52, p < .01; r_{\text{between}} = 0.57, p < .01$); and gratitude was significantly associated with thriving ($r_{\text{within}} = 0.65, p < .01; r_{\text{between}} = 0.77, p < .01$).

Three multilevel path models were estimated to test Hypothesis 1 to Hypothesis 3 (see Table 3). Hypothesis 1 predicted that daily fluctuations in host country support positively relates to daily fluctuations in thriving. The within-level main effect model (Model 1) showed that daily host country support was positively associated with thriving ($\gamma = 0.34, p < .01$), supporting Hypothesis 1. Hypothesis 2 predicted that mediating effect of gratitude in the daily relationship between host country support and thriving. As shown in Table 3, the within-individual mediation model (Model 2) showed host country support predicted gratitude ($\gamma = 0.16, p < .05$) which, in turn, predicted perceived thriving ($\gamma = 0.23, p < .01$). A Monte Carlo simulation with 20,000 replications used to generate

---

2 Factor loadings for each item are shown in Table S5 in the online supplemental document.
were computed by aggregating participants’ confidence intervals around the indirect effect (Preacher et al., 2010) found a positive indirect effect of host country support on thriving via gratitude (indirect effect = 0.05, SE = 0.02, 95% CI [0.0035, 0.0861]). Thus, Hypothesis 2 was supported. The direct effect of host country support on thriving was significant ($\gamma = 0.29$, $p < .01$), indicating gratitude partially mediated the daily relationship between host country support and thriving. It is important to note that, as shown in Table 3, only the regression path from host country support to gratitude was random across individuals because of the significant between-individual variance in slopes ($\tau_{11} = 0.14$, $p < .05$). The regression paths from host country support to thriving, however, would be the same across individuals because of the
non-significant between-individual variance in slopes ($\tau_{11} = .05, p = .24$) (see Table 3). And the regression paths from gratitude to thriving were also the same across individuals because of the non-significant between-individual variance in slopes ($\tau_{11} = .00, p = .57$) (see Table 3).

**Hypothesis 3.** Further predicted that ethnocentrism would moderate the within-individual relationship between daily host country support and gratitude such that the daily relationship should be weaker when ethnocentrism was high compared to when ethnocentrism was low. The cross-level interaction model (Model 3) showed that ethnocentrism significantly moderated the daily relationship between host country support and gratitude ($\gamma = -0.17, p < .01$) (see Table 3). We followed procedures recommended by Preacher et al. (2006) to estimate simple slopes. Simple slope analyses revealed the magnitude of the relationship between host country support and gratitude was weaker when ethnocentrism was high (+1 SD) (simple slope = 0.01, $SE = 0.08, p = .87$), compared to when ethnocentrism was low (−1 SD) (simple slope = 0.30, $SE = 0.08, p < .01$) (see Fig. 3). Therefore, Hypothesis 3 was supported. We also tested the conditional indirect effect of daily host country support on thriving through gratitude. We found that the conditional indirect effect was not significant when ethnocentrism was high (+1 SD) (indirect effect = 0.01, $SE = 0.02, p = .50$) and the conditional indirect effect was significant when ethnocentrism was low (−1SD) (indirect effect = 0.08, $SE = 0.03, p < .01$). These two indirect effects differed significantly from each other (difference = −0.07, $SE = 0.03, p < .05$).

**Discussion**

Adopting the perspective of positive psychology, our results provided evidence that sojourners could thrive during the pandemic. More specifically, our results indicated that daily host country support was associated with the positive emotion of gratitude, which, in turn, was related to greater thriving. Our results further indicated that ethnocentrism significantly attenuated the positive daily relationship between host country support and gratitude.

**Theoretical implications**

Our findings make several contributions to the sojourner’s literature. First, the current study is among the first to adopt a positive psychology perspective to understand sojourners’ experiences – especially when facing adversity. We believe this new lens can provide researchers with a nuanced understanding of the role of positive emotions such as gratitude and thriving (Ren et al., 2014). We further believe that by incorporating a positive psychology framework, we can begin to move beyond a mere understanding of sojourner *surviving* into a better understanding of sojourner *thriving*, similarly to how clinicians are beginning to move from a focus on moving clients from psychological disorder and normalcy into a state of psychological thriving. In other words, we agree that researchers need to progress from a fixation on “repairing the worst” to a state of “building the best” (Seligman & Csikszentmihalyi, 2000). We believe that researchers have neglected such positive qualities as support, trust, and love, which are the things that make life worth living (Seligman & Csikszentmihalyi, 2000) and further assist individuals in overcoming the storms of life and thus grow more resilient (Feeney & Collins, 2015).

Second, combining the theoretical model of thriving (Feeney & Collins, 2015), the dual function framework of gratitude (Kubacka et al., 2011), the broaden-and-build theory of positive emotions (Fredrickson, 1998; 2001), and social identity theory (Tajfel, 1982), we elucidated how and when host country support facilitates thriving. In accomplishing this, we expanded the motivating function of gratitude to self-development behaviors. Our results provided evidence that the pathway to thriving is facilitated through host country support by means of gratitude. We also documented a boundary condition in this pathway, namely ethnocentrism. Our findings answered the call for more moderated mediation research in the sojourner literature (Chen et al., 2010).

Third, we are among the first to consider sojourner well-being during the COVID-19 pandemic, and we do so utilize rigorous multilevel analyses involving responses during the COVID-19 outbreak. We believe this is important because, compared with other disasters, such as floods, tornadoes, and earthquakes, less is known about the individuals’ well-being during events such as pandemics (Rao & Greve, 2018). In short, we believe we have extended the literature by shedding light on sojourner’s experience during this unique and historical moment.

![Fig. 3. Ethnocentrism Moderates the Effect of Daily Host Country Support on Daily Gratitude.](image-url)
Practical implications

The outbreak and spread of COVID-19 will likely continue to affect people’s daily lives and well-being (Anicich et al., 2020). Perhaps sojourners’ lives have been especially disrupted during the pandemic. With foreign born-workers, including students and temporary workers, making up 17.4% of the labor force in the United States during 2019 (Bureau of Labor Statistics, 2019), we believe it is imperative for researchers to seek enhanced understanding of how organizations can assist these sojourners in mitigating the negative effects of COVID-19 and enhance their well-being. Our findings suggest that social support from the university and friends in the U.S. was critical to sojourners’ thriving. We, therefore, believe that organizations have a responsibility to offer support to sojourners. Our results support the notion that this support is likely to be perceived as appreciated and can assist sojourners to thrive, and in doing so, lead to positive outcomes from an organizational perspective.

Second, ethnocentrism likely plays a vital role in sojourners’ experience as our results indicated it attenuated perceived host country support. Hence, ethnocentrism may be a factor that organizations may want to incorporate into their pre-departure counseling to help potential sojourners decide if an overseas assignment is right for them. Third, our study found that gratitude is beneficial for sojourners’ thriving. Previous research has identified effective mechanisms for enhancing gratitude (Berger et al., 2019). For example, Emmons and McCullough (2003) found that writing down or contemplating grateful things aided in felt gratitude and Froh et al. (2009) found that writing gratitude letters also enhanced gratitude. Practitioners, thus, can employ these simple interventions in their attempts to improve sojourners’ thriving.

Limitations and future research

Several limitations need to be mentioned. First, our sample size is small, which limits the generalizability of the findings. However, the majority of our participants were from Asia, especially China, and were perhaps the ones most likely to experience increased hardship due to prejudice and bias. We also attempted to encourage our participants to participate in the daily surveys, and our success is reflected in the high response rate.

Second, the nine-day time frame is relatively short. We chose the nine-day period to collect the information, following the literature. For example, Norton et al. (2017) collected survey data from 74 employees across 10 workdays. Haar et al. (2017) collected data from 131 managers for four days. Even so, we encourage future study collect data using a larger number of days for the reason of generalizability (Ohly et al., 2010).

Third, all measures were self-report data, which may raise the concern of common method bias (Podsakoff et al., 2012). However, we believed that sojourners themselves were the obvious best judges of their own perceived social support, feelings of gratitude, and thriving. As such, we believe that self-reported measures were not only appropriate – but mandatory (Ford et al., 2018). Nonetheless, we encourage future research to replicate our findings using larger sample sizes, longer time-frames, and multiple sources data wherever appropriate.

Fourth, the strength of the mediation effect is relatively small which may raise concerns about the significance of our findings. According to Feeney and Collins (2015), there are several other mechanisms through which social support may predict thriving. Therefore, many other variables, such as psychological safety, motivational states, relational attitudes and needs satisfaction (Lee et al., 2015; Ryan & Deci, 2001), could be additional intraindividual mechanisms of social support and thriving. It may prove informative for future research to examine these different mechanisms.

Fifth, we treated host country support as a whole and did not distinguish the support between sources. Recently, scholars (Bender et al., 2019; English et al., 2021) suggested that different sources of social support (host nationals, co-nationals, and internationals) might have different effects in predicting sojourners experiences. Therefore, it would be interesting to differentiate different sources of host country support and examine their effects on sojourners’ thriving in the future.

Conclusion

In this study, we found that social support from other people in the host country engendered sojourners’ gratitude, which led to thriving during the COVID-19 pandemic. Further, the effect of host country support on thriving via gratitude is weaker for sojourners who are higher in ethnocentrism. We hope our study will motivate more research focused on how sojourners can thrive in a host country.

Author note

We declare that we have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

We gratefully acknowledge funding from Troy University and Grant 71901100 awarded to Lu Zheng from the National Natural Science Foundation of China.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.ijintrel.2022.04.005.
Takeuchi, R., Chen, G., & Lepak, D. P. (2009). Through the looking glass of a social system: Cross-level effects of high-performance work systems on employees’ attitudes. Personnel Psychology, 62, 1–29. https://doi.org/10.1111/j.1744-6570.2008.01127.x

Tavernise, S., & Oppel, R. A., Jr (2020, 23). Spit on, yelled at, attacked: Chinese-Americans fear for their safety. The New York Times. [https://www.nytimes.com/2020/03/23/us/chinese-coronavirus-racist-attacks.html].

Tesser, A., Gatewood, R., & Driver, M. (1968). Some determinants of gratitude. Journal of Personality and Social Psychology, 9, 233–236. https://doi.org/10.1037/h0025905

Tsang, J. A. (2006). Gratitude and prosocial behavior: An experimental test of gratitude. Cognition and Emotion, 20, 138-148. https://doi.org/10.1080/02699930500172341

Wood, A. M., Fehr, J. I., & Geraghty, A. W. A. (2010). Gratitude and well-being: A review and theoretical integration. Clinical Psychology Review, 30, 890-905. https://doi.org/10.1016/j.cpr.2010.03.005

Wood, A. M., Joseph, S., Lloyd, J., & Atkins, S. (2009). Gratitude influences sleep through the mechanism of pre-sleep cognitions. Journal of Psychosomatic Research, 66, 43-48. https://doi.org/10.1016/j.jpsychores.2008.09.002

Wood, A. M., Malby, J., Stewart, N., Linley, P. A., & Joseph, S. (2008). A social-cognitive model of trait and state levels of gratitude. Emotion, 8, 281-290. https://doi.org/10.1037/1528-3542.8.2.281