

## Original article

## Perceived stress and well-being: The role of social support as a protective factor among Peruvian immigrants in Spain



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## ABSTRACT

**Background:** Migration is a potentially stressful process due to the sociocultural changes and the adaptation processes that go along with it. However, social support can mitigate the impact of stress, ease the adaptation process and contribute to migrants' overall well-being. The aim of this study was to explore to what extent social support buffers the effects of stress and ethnic prejudice on subjective well-being and physical symptoms in a Peruvian immigrant community in Spain.

**Method:** One hundred and thirty seven people participated in the study, 67.2% of them women and 32.8% men, with an age range between 19 and 64 years, who responded to self-report instruments through an online survey. The statistical analysis consisted of obtaining a structural equation model (SEM) in order to estimate the direct, indirect and total effects involved in the relationships between the study variables.

**Results:** Social support was shown to have a significant direct effect ( $\beta = .174, p = .017$ ) on the participants' degree of subjective well-being, as well as an indirect effect mediated by both stress and ethnic prejudice ( $\beta = .170, p < .001$ ). No significant direct relationship was found between the degree of social support and the severity of participants' physical symptoms.

**Conclusions:** The level of social support contributes to subjective well-being and acts as a protective factor against the effects of high levels of stress and ethnic prejudice, thus fostering immigrants' process of adaptation to their new socio-cultural context.

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### Estrés percibido y bienestar: el papel del apoyo social como factor protector en inmigrantes peruanos en España

## RESUMEN

## Palabras clave:

Apoyo social

Estrés

Prejuicio étnico

Bienestar subjetivo

Inmigrantes

Peruanos

**Antecedentes:** La migración es un proceso potencialmente estresante debido a los cambios socioculturales y de adaptación que supone. No obstante, el apoyo social puede moderar el impacto del estrés, favorecer la adaptación y contribuir con el bienestar de las personas. El objetivo de este estudio fue explorar el papel amortiguador del apoyo social sobre el estrés y el prejuicio étnico en el nivel de bienestar subjetivo y en la severidad de síntomas físicos en inmigrantes peruanos residentes en España.

**Método:** Participaron 137 personas, 67.2% mujeres y 32.8% varones, con un rango de edad entre 19 y 64 años, quienes respondieron instrumentos de autoinforme a través de una encuesta *online*. El análisis estadístico consistió en obtener un modelo de ecuaciones estructurales (SEM) para estimar los efectos directos, indirectos y totales en la relación entre las variables de estudio.

**Resultados:** El apoyo social obtuvo un efecto directo significativo ( $\beta = .174, p = .017$ ) sobre el grado de bienestar subjetivo y también un efecto indirecto mediado por el nivel de estrés y el prejuicio étnico ( $\beta = .170, p < .001$ ). No se encontró ningún efecto directo significativo entre el grado de apoyo social y la severidad de los síntomas físicos.

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*Conclusiones:* El grado de apoyo social contribuye con el bienestar subjetivo y ejerce un papel de protección sobre los niveles de estrés y prejuicio étnico, lo cual favorece la adaptación de los inmigrantes a nuevos contextos socioculturales.

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The issue of migration has of late received a great deal of attention. The political, economic and social conditions faced by the populations of a range of developing countries are causing great numbers of people to attempt to move to other countries in search of improved opportunities and better living conditions. The Peruvian government's National Institute of Statistics and Informatics (INEI) estimates that between 1990 and 2017 there were 3,089,123 Peruvian citizens living abroad, representing approximately 10% of the country's population (INEI, 2018). Spain is one of the most common destination for Peruvian emigrants, playing host to 14.3% of the Peruvians living abroad (INEI, 2018). Peruvians are driven to migrate by a number of factors, including: the search for economic improvement (41.1%), family reunification (21.1%), unemployment (12.5%), study (10%), employment contracts (9.9%), and other factors (5.4%) (INEI, 2013).

From a psychological standpoint, the migration process can be very stressful. The nature of migration itself often brings with it issues such as language barriers, communication problems, sociocultural changes, economic problems, unemployment, social discrimination and the loss of social and family support. All of these factors can be significant sources of stress and can lead to mental health problems (Zarza & Sobrino, 2007).

However, studies have shown that certain protective factors can soften the impact of stress and allow individuals to better handle stressful situations. One of these variables is social support, which is defined as an individual's perception that support will be available should he or she need it (Lett et al., 2005). Social support can take a number of forms and serve a number of functions (e.g., instrumental, informational, emotional, etc.). Thus, the stress-buffering hypothesis maintains that social support can protect individuals from the pathogenic effects of a stressful event, provided that the available social resources are suited to meet the demands of the event (Cohen, 2004).

Social support plays a decisive role in immigrants' processes of sociocultural adaptation to their new countries. Several studies have shown that social support has a positive influence on well-being and that it is negatively associated with psychological symptomatology (Jibeen, 2011; Jibeen & Khalid, 2010; Tonsing, 2013). Social support contributes to the creation of meaning in life, and it has been shown to increase people's physical health (Finch & Vega, 2003). Other studies have confirmed the buffering effect that social support can have on stress, with support playing a role in preventing anxiety, depression and psychological symptomatology in general (Crockett et al., 2007; Lee, Koeske, & Sales, 2004; Singh, McBride, & Kak, 2015).

Researchers in Spain have found that social support exerts an influence on the subjective well-being of immigrants from Morocco (Hernández, Pozo, & Alonso, 2004) and from Latin America (Herrero, Fuente, & Gracia, 2010). Some studies have examined the kind of networks that provide social support and looked at the key role these networks play in the sociocultural adaptation process. Hernández, Pozo, Alonso, and Martos (2005) found that the subjective well-being of Moroccan migrants is predicted by the degree of satisfaction they feel with the emotional support they receive from the native population of the host society, coupled with their satisfaction with the levels of informational support and

other assistance provided by fellow migrants. Domínguez-Fuentes and Hombrados-Mendieta (2012) showed that emotional support from relatives and instrumental support from the native-born population and from aid associations were predictive of happiness among immigrant women mainly from Latin America and Africa. García-Cid, Hombrados-Mendieta, Gómez-Jacinto, Palma-García, and Millán-Franco (2017) provided evidence that social support from family members and from the native population predicts migrants' degree of life satisfaction in men and women from Latin America, Asia, Africa and Eastern Europe. All this research makes clear that social support is associated with well-being and health. However, the ways in which social support acts to protect migrants from the effects of stress have yet to be conclusively studied (Uchino, Bowen, Carlisle, & Birmingham, 2012).

Ethnic prejudice also plays an important role in migrants' adaptation process, as those who are the targets of this prejudice face an additional obstacle. However, little research has been done on the factors that influence ethnic prejudice and psychological adjustment in immigrants, as well as those factors that allow them to protect themselves from negative experiences related to their ethnicity and minority status. Studies show that ethnic prejudice harms the subjective well-being of its victims (Hernández et al., 2005) and damages their mental and physical health (Agudelo-Suárez et al., 2009; Gil-González et al., 2014; Williams, Neighbors, & Jackson, 2003). Some studies have examined how social support might protect individuals from some of the damage inflicted by ethnic prejudice (Fernández, Silván-Ferrero, Moleró, Gaviria, & García-Ael, 2015; Finch & Vega, 2003; Jasinskaja-Lahti, Liebkind, Jaakkola, & Reuter, 2006; Singh et al., 2015). For example, Jasinskaja-Lahti et al. (2006) reported that social support received from both other migrants from the same country of origin and from the native-born population can cushion migrants' well-being from the damage inflicted by discrimination. One possible explanation is that active coping strategies, such as social support, can buffer the effects of ethnic prejudice by allowing an individual to challenge the validity of discriminatory events and reduce their negative feelings (Pascoe & Smart Richman, 2009). However, the buffering role of social support on ethnic prejudice is still inconclusive.

On the other hand, studies on Peruvian immigrants in Spain are certainly scarce. For example, Maya, Martínez, and García (1999) reported a qualitative study on the perception of the evolution of the social networks of Peruvian women. In another study, these authors found that the psychological well-being of Peruvian immigrant women was significantly predicted by the sufficiency attributed to their social network, the number of Spaniards in their support network, and their perception of personal control (Martínez, García, & Maya, 2002).

In summary, there has been little research to date into the mechanisms underlying the phenomena of social support, stress, subjective well-being and physical symptomatology among Peruvian migrants in Spain. This study provides empirical evidence on these issues, exploring these underlying processes and how they contribute to immigrants' adaptation to a new sociocultural context. The study's overall aim was to determine the degree to which social support exerts an influence on stress and ethnic prejudice,

and the extent to which these variables contribute to explaining the degree of subjective well-being and the physical symptoms experienced by Peruvian immigrants residing in Spain. The specific objectives were: (a) to assess the stress-buffering hypothesis, meaning to determine how and to what degree a person's network of social support affects his or her level of stress, and how this support can lessen the impact of this stress on subjective well-being and on physical symptoms and (b) to assess the degree to which social support acts to protect individuals from the harmful effects of ethnic prejudice, softening the impact on their subjective well-being and on their physical symptoms.

In light of the empirical evidence available from prior studies, the following hypotheses were formulated: (a) that social support has a direct effect on subjective well-being and on physical symptoms; (b) that social support exerts an indirect effect on subjective well-being and physical symptoms, mediated by levels of stress; and (c) that social support has an indirect effect on subjective well-being and physical symptoms, mediated by the experience of ethnic prejudice.

## Method

### Participants

The sample included 137 participants, 67.2% women and 32.8% men, with ages ranging from 19 to 64 years old ( $M = 37.3$ ;  $SD = 10$ ), all of them Peruvian citizens residing in Spain. Most of the participants reported their marital status as either married (43.1%) or single (32.8%). Meanwhile, in terms of education, the largest groups reported having completed advanced vocational training (31.4%), undergraduate university studies (31.4%) or graduate studies (28.5%). The most common causes of migration were due to family (44.5%), studies (27%) and the search for economic improvement (14%). Most of them are actively employed (65%) and have stable, long-term immigration status (51.8% were permanent residents, while 26.3% were naturalized Spanish citizens). The participants were recruited in the autonomous communities of Madrid (26.3%), Catalonia (20.4%), Andalusia (24.1%), Valencia (16.1%) and others (13.1%).

### Instruments

#### Social support and social network

The Medical Outcomes Social Support questionnaire (MOS; adapted by [Revilla, Luna del Castillo, Bailón, & Medina, 2005](#)) was used to assess perceived social support. This questionnaire consists of 20 items answered on a five-point Likert scale. It is made up of three factors: emotional/informational support, affective support and instrumental support. This measurement displayed a Cronbach's  $\alpha$  coefficient of .98 for the sample in this study. In order to measure the participants' social networks, the first item of the questionnaire was adapted to ask about various nationalities: Spanish people (natives), Peruvians (compatriots) and other foreigners (other immigrants).

#### Stress

The ten-item version of the Perceived Stress Scale (PSS-10; adapted by [Remor, 2006](#)) was used to assess perceived stress during the last month. The PSS-10 consists of 10 items, all of them answered on a five-point Likert scale. The sample in this study showed an internal consistency coefficient of  $\alpha = .76$ .

#### Ethnic prejudice

This variable was measured using the one-question "Do you feel rejected because you are from Peru?" which respondents answered on a seven-point Likert scale. This item was adapted from an earlier

paper by [Hernández et al. \(2005\)](#), who used this item to measure ethnic prejudice in immigrants in the Spanish context.

#### Subjective well-being

Lima Happiness Scale (LHS; [Alarcón, 2006](#)) was included to assess subjective well-being. The LHS consists of 27 items answered on a five-point Likert scale. It measures four factors: absence of intense suffering, life satisfaction, personal fulfillment and enjoyment of life. The internal consistency coefficient for the sample in this study was  $\alpha = .95$ .

#### Physical symptoms

Patient Health Questionnaire (PHQ-15; adapted by [Ros, Comas, & Garcia-Garcia, 2010](#)) was used to assess physical symptoms during the last month. This questionnaire is made up of 15 items answered on a three-point Likert scale. The internal consistency for the sample in this study was  $\alpha = .87$ .

#### Sociodemographic data

A form was created to collect data on sex, age, marital status, education, immigration status, reason for migration, employment status and current place of residence.

#### Procedure

First, an online form was designed to obtain the participants' informed consent and to apply the data collection instruments detailed above. Then, the help of the Peruvian consulate in Spain was enlisted, along with that of community associations and other groups of Peruvians residing in Spain, all of whom agreed to share the link to the online form via their social networks. Participants were asked to provide informed consent and were told of the voluntary, confidential and anonymous nature of the study.

Data collection was carried out during the months of January and May 2018, and then in February 2020 to increase the sample. One hundred and forty three visits to the online form were registered, obtaining 137 correctly completed answers. The data obtained were processed in a database for later statistical analysis.

#### Statistical analysis

The statistical analysis was conducted using the Stata 14.1 software program for Windows. First, a correlation matrix was obtained for the variables in the study. Due to the strong association between the statistical significance of the  $R$  coefficients and the sample size, the effect size was considered to be low-poor for  $|r| > .10$ , moderate-medium for  $|r| > .24$  and large-high for  $|r| > .37$  (these thresholds correspond to Cohen's- $d$  of .20, .50 and .80 respectively; [Rosnow & Rosenthal, 1996](#)). The next step was to obtain a SEM to assess the underlying mechanisms (direct and indirect effects, along with paths of mediation) at work among social support, stress and ethnic prejudice, subjective well-being and physical symptoms.

The maximum likelihood estimation model was used, and goodness of fit was assessed using the usual statistical methods: chi-squared ( $\chi^2$ ) test, root mean square error of approximation (RMSEA), Bentler's Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI). The model degree of fit was deemed acceptable because: the results of the  $\chi^2$  were non-significant,  $RMSEA < .08$ ,  $TLI > .9$  and  $CFI > .9$ . The model's overall predictive capacity was determined using the coefficient of determination (CD).

In this study, a SEM was calculated in order to assess the protective role of social support against both stress and ethnic prejudice. Additionally, the study generated a latent variable to measure participants' social networks, namely the total number of significant

social contacts each participant had, according to the kind of network.

## Results

### Descriptive statistics and bivariate correlations

Table 1 shows the descriptive statistics and the correlation matrix for the variables in the study. The associations between variables that were found to be moderate to high appear in bold. They indicate that higher degrees of social support are associated with larger numbers of social contacts with members of the native-born population, as well as with lower levels of stress. Meanwhile, higher levels of stress are associated with more severe physical symptoms and with lower scores for subjective well-being. Higher levels of social support are also associated with greater degrees of subjective well-being and lower scores for ethnic prejudice. Additionally, ethnic prejudice is associated with lower levels of subjective well-being and more reports of physical symptoms. The only association found for participants' immigration status was with a greater amount of contact with the native-born population.

### SEM results

The path-diagram displayed in Fig. 1 shows the standardized coefficients of the SEM in the study (Table 2 displays the results of this model in full). The model obtained a good fit [ $\chi^2 = 22.535$  ( $df = 14$ ,  $p = .068$ ), CFI = .963, TLI = .925, RMSEA = .067] and showed a high degree of overall predictive capacity ( $CD = .702$ ). The results obtained indicate that participants who reported higher levels of social support and lesser degrees of stress tended to score higher on subjective well-being. The participants' perceived stress levels also acted as a mediating variable in the relationship between social support and subjective well-being: greater social support predicts lower levels of stress, which in turn contributes to increases in the reported levels of subjective well-being. The variable of severity of physical symptoms displayed only one direct and positive association, with the levels of stress.

On the other hand, social support contributes directly to subjective well-being, and it also exerts an indirect effect on well-being via the degree of ethnic prejudice experienced (with the latter variable acting in a mediating role). The severity of physical symptoms was directly affected only by the degree of ethnic prejudice.

## Discussion

The aim of this study was to examine the underlying mechanisms operating between the phenomena of social support, stress, ethnic prejudice, subjective well-being and the severity of physical symptoms among Peruvian immigrants residing in Spain. The

results obtained from the SEM analysis were to a large degree in accordance with the hypotheses posed at the start of the study. These results indicate that social support contributes to subjective well-being and acts as a buffer against the harmful effects of stress and ethnic prejudice. However, no evidence was found to show that social support has any direct (or indirect) effect on physical symptoms.

An analysis of the model constructed to explain the functioning of this protection against the effects of stress shows that networks of relationships with both compatriots and local natives play a central role within migrants' overall social networks, with connections with the latter group occupying the most important position. The extent of migrants' social networks has an influence on the degree of perceived social support. This finding echoes those of other studies, many of which have underlined the importance of a network made up of compatriots and members of the native-born population to those in the process of adapting and becoming integrated into a new society (Dominguez-Fuentes & Hombrados-Mendieta, 2012; García-Cid et al., 2017; Hernández et al., 2005; Jasinskaja-Lahti et al., 2006; Martínez et al., 2002). Social connections with the native-born population represent opportunities to develop the skills and values they need in order to navigate their new cultural environment, while networks of compatriots allows them to communicate with others who have shared similar experiences and problems (García, Martínez, Albar, & Santolaya, 2002).

Social support acts as a buffer against stress, reducing the impact of stress on subjective well-being. This finding is also largely in accordance with previous studies in the literature (Crockett et al., 2007; Lee et al., 2004; Singh et al., 2015). However, this study did not find any relationship between social support and the variable of physical symptoms. This result would seem to contradict earlier research, given that prior studies have thoroughly documented the connections between social support and physical health. Nonetheless, a relationship was observed between stress and physical symptoms. It is worth noting here that recent studies have found that the strength of the relationship between social support and physical health is affected by migrants' ages, with older adults showing the most accentuated effects (Choi, Kwon, Lee, Choi, & Choi, 2018). Our sample was made up mainly of young adults, so this tendency could point to one possible explanation for the fact that our study found no significant relationship between social support and physical health.

On the other hand, the analysis of the model shows that social support reduces the effects of ethnic prejudice on subjective well-being. This result is also in accordance with the findings of other studies (Fernández et al., 2015; Finch & Vega, 2003; Jasinskaja-Lahti et al., 2006; Singh et al., 2015), which have indicated that social support can also protect people from the negative effects of discrimination. According to Pascoe and Smart Richman (2009), contact with friends or relatives after having experienced discrim-

**Table 1**  
Descriptive data for the sample and correlation matrix (N = 137).

		Descriptives		Correlation matrix									
		Mean	SD	1	2	3	4	5	6	7	8		
1	Perceived stress	15.03	6.05	1									
2	Social support	72.38	21.06	-.28 <sup>a</sup>	1								
3	Subjective well-being	102.78	17.34	-.52 <sup>a</sup>	.35	1							
4	Physical symptoms	22.73	5.42	.56 <sup>a</sup>	-.12	-.37 <sup>a</sup>	1						
5	Compatriot network	4.09	3.83	-.20	.19	.18	-.09	1					
6	Native-born network	5.02	4.55	-.28 <sup>a</sup>	.32 <sup>a</sup>	.15	-.21	.43 <sup>a</sup>	1				
7	Immigrant network	3.41	3.88	-.19	.04	.06	-.15	.41 <sup>a</sup>	.41 <sup>a</sup>	1			
8	Ethnic prejudice	2.09	1.41	.41 <sup>a</sup>	-.29 <sup>a</sup>	-.43 <sup>a</sup>	.41 <sup>a</sup>	-.11	-.23	-.06	1		
9	Immigration status	.77	.42	-.11	.09	.07	.00	.19 <sup>a</sup>	.33 <sup>a</sup>	.07	.05	1	

Note. SD: standard deviation.

<sup>a</sup> Bold: effect size into the moderate–medium ( $|r| > .24$ ) to large–high ( $|r| > .37$ ) range.

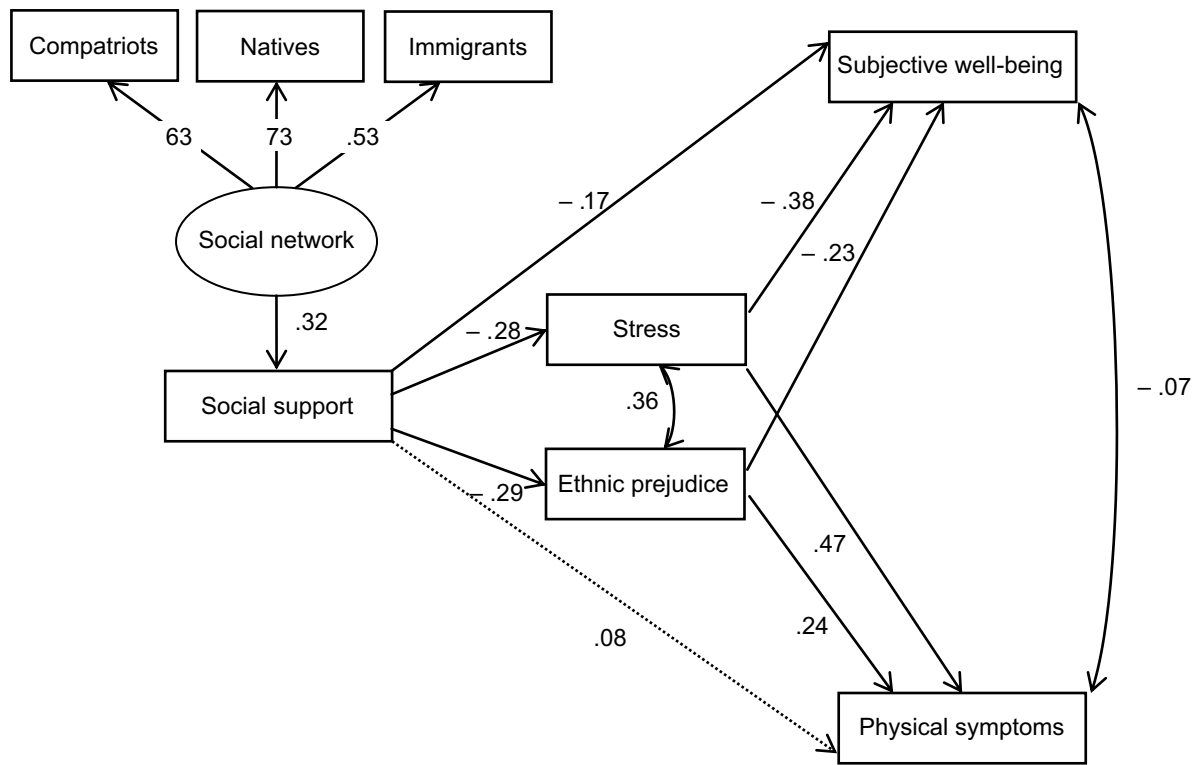


Fig. 1. Path diagram with the standardized coefficients of the SEM in the study (N = 137). Note. Continuous line: significant parameter. Dotted line: non-significant parameter.

Table 2  
Results for the SEM in the study: direct, indirect and total effects (n = 137).

	B	SE	z	p	IC 95% B	St-B
<b>Direct and indirect effects to SWB</b>						
<i>Direct effects</i>						
Social support	.143	.060	2.40	.017	.026; .261	.174
Stress	-1.094	.218	-5.01	<.001	-1.521; -.666	-.382
Ethnic prejudice	-2.799	.937	-2.99	.003	-4.636; -.9615	-.228
<i>Indirect effects</i>						
Via social support and stress	.087	.031	2.79	.005	.026; .148	.105
Via social support and ethnic prejudice	.054	.024	2.27	.023	.007; .010	.065
Via social support, stress and ethnic prejudice	.140	.040	3.52	<.001	.062; .218	.170
<i>Total effects</i>						
Social support	.284	.066	4.30	<.001	.154; .413	.345
<b>Direct and indirect effects to physical symptoms</b>						
<i>Direct effects</i>						
Social support	.021	.019	1.14	.256	-.015; .058	.083
Stress	.424	.069	6.17	<.001	.290; .559	.474
Ethnic prejudice	.908	.295	3.07	.002	.328; 1.487	.237
<i>Indirect effects</i>						
Via social support and stress	-.034	.011	-2.95	.003	-.056; -.011	-.130
Via social support and ethnic prejudice	-.017	.007	-2.30	.021	-.032; -.003	-.068
Via social support, stress and ethnic prejudice	-.051	.014	-3.61	<.001	-.079; -.023	-.198
<i>Total effects</i>						
Social support	-.030	.22	-1.36	.174	-.072; .013	-.115

Note. B: unstandardized coefficient. SE: standard error. St-B: standardized coefficient.

ination can help the victims of this discrimination to regain their self-esteem and can prevent the appearance of depressive symptoms. Another possible explanation for the effect could be that experiences of ethnic prejudice increase when social support is insufficient or lacking (Jasinskaja-Lahti et al., 2006).

One limitation of this study is connected to the sample. The sample size is small, and it is made up of more women than men. Additionally, non-probability sampling was used, meaning that it is difficult to generalize the results.

In spite of these limitations associated with the sample, this study has contributed evidence in favor of the hypothesis that social support plays a protective role in the adaptation process of the members of a group of Peruvian immigrants. More specifically, the evidence indicates that this support acts to cushion the impact of stress and blunt the effects of ethnic prejudice on Latin American migrants.

There is much room for further research into the psychological mechanisms that are at work when social support exerts an

influence on well-being and health. Meanwhile, it is also necessary to examine other variables that have received less attention but that may shed light on these relationships. Future researchers should move forward along these lines and attempt to overcome the sort of limitations that were present in this study. However, it should be noted again that despite the limitations, the results of this study confirm the key role played by social support in easing the adaptation process and promoting migrants' participation in society. One practical implication of these findings might be a need to develop risk prevention and health promotion programs serving migrant groups and to design these programs to reflect the critical role played by social support in the well-being of these individuals. It would likely also be effective to take steps to help migrants extend their social networks with the native-born population and with their compatriots in order to improve the quality of the social support they receive. This would allow people to experience the more positive side of migration. It would foster personal growth, encourage the learning of new social skills, ease adaptation and contribute to greater well-being (Walsh, Shulman, & Maurer, 2008). Finally, it is necessary to strengthen the integration policies in countries that receive immigrants to provide support to these public health initiatives.

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### Conflict of interest

None.

### References

- Agudelo-Suárez, A., Gil-González, D., Ronda-Pérez, E., Porthé, V., Paramio-Pérez, G., García, A. M., & Garí, A. (2009). Discrimination, work and health in immigrant populations in Spain. *Social Science and Medicine*, 68(10), 1866–1874.
- Alarcón, R. (2006). Desarrollo de una escala factorial para medir la felicidad. *Inter-American Journal of Psychology*, 40(1), 99–106.
- Choi, E., Kwon, Y., Lee, M., Choi, J., & Choi, I. (2018). Social relatedness and physical health are more strongly related in older than younger adults: Findings from the Korean adult longitudinal study. *Frontiers in Psychology*, 9, 1–12.
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59(8), 676–684.
- Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: Relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, 13(4), 347–355.
- Domínguez-Fuentes, J. M., & Hombrados-Mendieta, M. I. (2012). Social support and happiness in immigrant women in Spain. *Psychological Reports*, 110(3), 977–990.
- Fernández, I., Silván-Ferrero, P., Molero, F., Gaviria, E., & García-Ael, C. (2015). Perceived discrimination and well-being in Romanian immigrants: The role of social support. *Journal of Happiness Studies*, 16(4), 857–870.
- Finch, B. K., & Vega, W. A. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health*, 5(3), 109–117.
- García-Cid, A., Hombrados-Mendieta, I., Gómez-Jacinto, L., Palma-García, M., & Millán-Franco, M. (2017). Apoyo social, resiliencia y región de origen en la salud mental y la satisfacción vital de los inmigrantes. *Universitas Psychologica*, 16(5), 1–14.
- García, M., Martínez, M., Albar, M. J., & Santolaya, F. (2002). Inmigrantes y recursos sociales naturales La aplicación del modelo del convoy social al proceso de aculturación. *Migraciones*, 11, 83–111.
- Gil-González, D., Vives-Cases, C., Borrell, C., Agudelo-Suárez, A. A., Davó-Blanes, M. C., Miralles, J., & Álvarez-Dardet, C. (2014). Racism, other discriminations and effects on health. *Journal of Immigrant and Minority Health*, 16(2), 301–309.
- Hernández, S., Pozo, C., & Alonso, E. (2004). Apoyo social y bienestar subjetivo en un colectivo de inmigrantes: ¿Efectos directos o amortiguadores? *Boletín de Psicología*, 80(80), 79–96.
- Hernández, S., Pozo, C., Alonso, E., & Martos, M. J. (2005). Estructura y funciones del apoyo social en un colectivo de inmigrantes marroquíes. *Anales de Psicología*, 21(2), 304–315.
- Herrero, J., Fuente, A., & Gracia, E. (2010). Covariates of subjective well-being among Latin American immigrants in Spain: The role of social integration in the community. *Journal of Community Psychology*, 38(5), 607–621.
- Instituto Nacional de Estadística e Informática. (2013). *Resultados de la Primera Encuesta Mundial a la Comunidad Peruana en el Exterior 2012*. Lima: OIM.
- Instituto Nacional de Estadística e Informática. (2018). *Perú: Estadísticas de la Emigración Internacional de Peruanos e Inmigración de Extranjeros, 1990-2017*. Lima: OIM.
- Jasinskaja-Lahti, I., Liebkind, K., Jaakkola, M., & Reuter, A. (2006). Perceived discrimination, social support networks, and psychological well-being among three immigrant groups. *Journal of Cross-Cultural Psychology*, 37(3), 293–311.
- Jibeen, T. (2011). Moderators of acculturative stress in Pakistani immigrants: The role of personal and social resources. *International Journal of Intercultural Relations*, 13(4), 1597–1606.
- Jibeen, T., & Khalid, R. (2010). Predictors of psychological well-being of Pakistani immigrants in Toronto Canada. *International Journal of Intercultural Relations*, 34(5), 452–464.
- Lee, J. S., Koeske, G. F., & Sales, E. (2004). Social support buffering of acculturative stress: A study of mental health symptoms among Korean international students. *International Journal of Intercultural Relations*, 28(5), 399–414.
- Lett, H. S., Blumenthal, J. A., Babyak, M. A., Strauman, T. J., Robins, C., & Sherwood, A. (2005). Social support and coronary heart disease: Epidemiologic evidence and implications for treatment. *Psychosomatic Medicine*, 67(6), 869–878.
- Martínez, M., García, M., & Maya, I. (2002). Social support and locus of control as predictors of psychological well-being in Moroccan and Peruvian immigrant women in Spain. *International Journal of Intercultural Relations*, 26(3), 287–310.
- Maya, I., Martínez, M., & García, M. (1999). Cadenas migratorias y redes de apoyo social de las mujeres peruanas. *Demófilo: Revista de Cultura Tradicional de Andalucía*, 29, 87–105.
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135(4), 531–554.
- Remor, E. (2006). Psychometric properties of a European Spanish version of the Perceived Stress Scale (PSS). *The Spanish Journal of Psychology*, 9(1), 86–93.
- Revilla, L., Luna del Castillo, J., Bailón, E., & Medina, I. (2005). Validación del cuestionario MOS de apoyo social en atención primaria. *Medicina de Familia*, 6(1), 10–18.
- Ros, S., Comas, A., & García-García, M. (2010). Validation of the Spanish version of the PHQ-15 questionnaire for the evaluation of physical symptoms in patients with depression and/or anxiety disorders: DEPRE-SOMA study. *Actas Espanolas de Psiquiatria*, 38(6), 345–357.
- Rosnow, R. L., & Rosenthal, R. (1996). Computing contrasts, effect sizes, and counterfactuals on other people's published data: General procedures for research consumers. *Psychological Methods*, 1(4), 331–340.
- Singh, S., McBride, K., & Kak, V. (2015). Role of social support in examining acculturative stress and psychological distress among Asian American immigrants and three sub-groups: Results from NLAAS. *Journal of Immigrant and Minority Health*, 17(6), 1597–1606.
- Tonsing, K. N. (2013). Predictors of psychological adaptation of South Asian immigrants in Hong Kong. *International Journal of Intercultural Relations*, 37(2), 238–248.
- Uchino, B. N., Bowen, K., Carlisle, M., & Birmingham, W. (2012). Psychological pathways linking social support to health outcomes: A visit with the "ghosts" of research past, present, and future. *Social Science and Medicine*, 74(7), 949–957.
- Walsh, S., Shulman, S., & Maurer, O. (2008). Immigration distress, mental health status and coping among young immigrants: A 1-year follow-up study. *International Journal of Intercultural Relations*, 32(5), 371–384.
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, 93(2), 200–208.
- Zarza, M. J., & Sobrino, M. I. (2007). Estrés de adaptación sociocultural en inmigrantes latinoamericanos residentes en Estados Unidos vs España: Una revisión bibliográfica. *Anales de Psicología*, 23(1), 72–84.