

# SENSE OF COMMUNITY AND SATISFACTION WITH LIFE AMONG IMMIGRANTS AND THE NATIVE POPULATION

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*The aim of this study was to analyze the influence of the sense of community (SOC) on satisfaction with life (SWL) in native and immigrant populations in Spain. The main hypothesis was that SOC would moderate the negative effects associated with the immigrant adaptation process. It was further hypothesized that there would be no differences in SWL between immigrants with a high SOC and the native population. The study included 1,646 participants living in Malaga (Spain), comprising 946 natives and 700 immigrants. Data were collected using random route sampling and survey methodology. The results showed that people with higher SOC had significantly greater SWL. It was also found that SWL was greater in natives than in immigrants when the level of SOC was low or medium. However, when SOC was high there were no significant differences between the groups in SWL. The data support the hypothesis that SOC acts as a moderating variable that buffers the effect of the adaptation process experienced by immigrants. © 2013 Wiley Periodicals, Inc.*

Sarason (1974) introduced the notion of psychological sense of community (SOC) and argued that it is central to well-being because it reflects membership and interrelationships with a greater range of people. Subsequently, the concept was widely studied and clarified by several authors (e.g., Chavis, 1983; Chavis, Hogge, McMillan, & Wandersman,

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1986; Chavis & Pretty, 1999; McMillan & Chavis, 1986) for whom SOC involves the sense of belonging, membership, and personal involvement. It also involves the reciprocal influence between the individual and the community: integration and the satisfaction of needs, and connection and emotional involvement.

According to McMillan and Chavis (1986), a “sense of community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together” (p. 9). Integral to the achievement of SOC is a feeling of emotional safety that is created by membership, a sense of belonging to and identification with a larger community.

SOC is a dynamic concept that depends on a system of relationships that can be established in different contexts and with different members (Lorion & Newbrough, 1996). Hill (1996) stressed that the concept of SOC has a strong contextual nature and should be studied using diverse populations. In this sense, immigrants have attracted the interest of researchers, since arrival in a new country involves an adaptation process that entails the development of social networks and a SOC.

Data provided by the United Nations Department of Economic and Social Affairs on the immigrant population in 2010 indicate that 3.1% of the world’s population (214 million people) were living outside their country of birth. Most of the world’s migrants live in Europe (70 million in 2010), followed by Asia (61 million), and Northern America (50 million). Data obtained from Eurostat (2009) indicate that immigrants in Spain represent 12.3% of the population, which is twice the European Union (EU) average. In just 10 years, Spain has become the European Union country with the second largest number of immigrants, although growth in immigration has decreased because of the economic recession. Most immigrants come from Latin America followed by those from the EU and Africa.

Immigration involves a major change that can have both positive and negative consequences for immigrants. On the one hand, it entails the search for better living conditions; on the other hand, it involves breaking with their social networks and culture of origin. Immigration and adaptation to a new country involves the loss of SOC with the culture of origin and the development of a new SOC as part of the integration process in the new culture (Bathum & Baumann, 2007).

Immigration leads to changes in interaction patterns between immigrants and the host population that affect SOC (Hombrados-Mendieta, Gomez-Jacinto, & Domínguez-Fuentes, 2009). In plural societies immigrants have to develop new adaptation strategies (Downie et al., 2007). The process of interaction with the native population is complex because the social relationship patterns may be very different from those of the host society involving new elements regarding racial, linguistic, and religious issues (Giménez & Perez, 2003).

In the process of adaptation to new culture, immigrants experience significant stress that researchers have termed acculturative stress (Berry, 1997). This adaptation process has important effects on the well-being of the immigrant population. The migration experience is associated with a multitude of stressors that decrease the well-being of immigrants: language barriers, communication problems, sociocultural changes, economic problems, unemployment, social marginalization, and loss of social and family support (Amit & Litwin, 2010; Zarza & Sobrino, 2007).

Studies on the social integration and well-being of immigrants (e.g., Amit, 2010; Anson, Pilpel, & Rolnik, 1996; McMichael & Manderson 2004; Neto, 2001) have paid special attention to indicators of subjective well-being and thoroughly analysed how

immigrants feel about living in the host society. For example, Massey and Redstone (2006) studied the integration of immigrants in the United States, taking into account both socioeconomic variables and a subjective measure of life satisfaction. Their results showed that immigrants who expressed greater life satisfaction had a greater tendency to become integrated and settle down.

This study and others demonstrate the need to examine immigrants' perceptions of their level of integration and satisfaction (Lester, 2005). Several authors suggest that immigrants report less well-being when compared with the host population (Ortiz & Arce, 1986; Safi, 2010; Silveira, Skoog, Sundh, Allebeck, & Steen, 2002; Verkuyten, 1994; Vieno, Santinello, Lenzi, Baldassari, & Mirandola, 2009). However, other studies show that well-being among immigrants and natives is similar (e.g., Beirens & Fontaine, 2011; Lam, Tsoi, & Chan, 2005; Misajon & Cummins, 1999). Many researchers suggest that low levels of well-being among immigrants are the result of the process of adaptation to the new context and acculturation stress (Cheng, 1997; Leslie, 1992; Mui, 2001; Shen & Takeuchi, 2001; Vega, Kolody, Valle, & Weir, 1991). Studies on immigrant integration cite the relative deficit of social capital experienced by immigrants in a new country as compared with the native-born. Hao and Johnson (2000) found that human capital and participation are important determinants of emotional well-being for both immigrants and natives.

It has also been suggested that the degree of interaction and social integration between ethnic minorities and the rest of the community are key elements in predicting life satisfaction among immigrants (Cooper, Okamura, & Gurka, 1992). Thus, a wide range of research has suggested that social relationships, SOC and integration in the community are relevant to explaining individual well-being. This is especially important when dealing with people, such as the immigrant population, who are experiencing problems in social integration. However, there has been little research on the positive influence that social integration may have on immigrant well-being (Herrero, Fuente, & Gracia, 2011).

Thus, SOC is of particular relevance as it facilitates relationships, identity, social organization, and adaptation to new contexts (Bishop, Colquhoun, & Johnson, 2006; Cantillon, Davidson, & Schweitzer, 2003; Fisher & Sonn, 2002; Malone & Dooley, 2006; Sonn, 2002).

## **PRESENT STUDY**

Research has shown that SOC is important for positive well-being. Although there is abundant empirical evidence on the effects of SOC on well-being, an important limitation in the previous literature is that few studies have analyzed the SOC in the native and the immigrant population and their relation with satisfaction with life (SWL). SOC has been typically studied in relation to a set of related concepts, such as subjective well-being, quality of life, life satisfaction, or happiness. In this study, we focus on overall SWL, which corresponds to the cognitive component of well-being (Diener, Emmons, Larsen, & Griffin, 1985). There are few studies on the effect of SOC among immigrants on well-being and/or the association of SOC and SWL in immigrants and the native population.

Being an immigrant is a stressor with negative effects on the well-being of the individual. As mentioned, immigrants report less well-being than natives. The ability of SOC to directly improve levels of well-being has also been demonstrated. Thus, this study investigated the ability of SOC to moderate the negative effects associated with the immigrant adaptation process.

Some studies have confirmed the moderating role of positive social on interaction immigrant well-being. Some of these studies suggest that social support appears to moderate the effect of discrimination-associated acculturation stress experienced by this population (Finch, 2003; Golding & Burnam, 1990; Jasinskaja-Lahti & Liebkind, 2007; Jibeen & Khalid, 2010).

Following this line, the main hypothesis of this study is that SOC can moderate the negative effects associated with the immigrant adaptation process. If demonstrated, it would be expected that SOC would have a potentiating effect on SWL among immigrants. Thus, we would expect immigrants to have less SWL than natives, but only if they had not developed a good SOC in the new country. If their SOC is well-established, then their level of satisfaction would not differ from that of natives. SOC would then be a variable buffering the immigrant adaptation process.

Given this background, the present study not only analyzes the main effects on SWL of being an immigrant or having a good SOC or not, but also particularly focuses on the interaction between both variables, as well as on the moderating capacity of SOC on immigrant SWL.

The study was conducted in Malaga. This is a Spanish city, with 568,202 inhabitants according to the 2012 census. It is the sixth largest city in Spain and one of the oldest cities in Europe. Currently, Malaga is an important economic and cultural center, and a major communications node with significant activity in the service sector and tourism. Since the late 20th century Málaga has become a focus of attraction for immigrants; in 2011, the number of foreign residents totalled 47,925. The Permanent Observatory for Immigration Report (2012) states that Málaga Province ranks fifth in the number of immigrants in Spanish provinces. According to the civil register for 2012 published by Malaga City Council, the current immigrant population is 8.84% (Málaga Council, 2012).

## METHOD

### *Participants*

In total, 1,646 participants were included in the study, of whom 946 were natives (55% female and 45% male) aged between 18 and 96 years (mean [ $M$ ] = 35.17, standard deviation [ $SD$ ] = 15) and had lived in the neighbourhood for an average of 15 years. There were 700 immigrant participants (54% female and 46% male) aged between 18 and 77 years ( $M$  = 31.32,  $SD$  = 10.30) and had lived in the neighbourhood for an average of 4.8 years. The immigrants' length of stay in Spain ranges from 1 year to 35 years ( $M$  = 7.30,  $SD$  = 5.90).

In total, 58% of the immigrants interviewed came from Latin America, 28% from Eastern Europe, and 14% from Africa. This proportion of nationalities is representative of the distribution of immigrants in Málaga (Spain). Only 9.5% did not have their paperwork fully in order at the time of the study. Table 1 shows the sociodemographic characteristics of the participants, as well as the chi-square values showing the differences between immigrants and natives in marital status, educational attainment, and employment status. These differences reached statistical significance: marital status, chi-square = 20.25, degree of freedom [ $df$ ] = 4,  $p$  < 0.01; educational attainment, chi-square = 111.35,  $df$  = 6,  $p$  < 0.01; and employment status, chi-square = 122.63,  $df$  = 3,  $p$  < 0.01. As expected, both samples had different demographic characteristics. There were more married partners in the native group and there were more divorced or cohabiting partners in the immigrant

**Table 1. The Sociodemographic Characteristics of the Participants**

		Native	Immigrants
<b>Marital status</b>	Married	44.1%	38.3%
	Single	47.3%	47.3%
	Divorced	3.9%	8.3%
	Partnership	3.1%	4.9%
	Widow(er)	1.6%	1.3%
	Chi-square = 20.25 $df = 4$ $p < 0.01$		
<b>Education</b>	University	13.4%	11.8%
	College or similar	10.9%	7.0%
	High school	39.2%	22.4%
	FP	6.5%	6.1%
	Secondary school	12.4%	26.6%
	Primary school	14.1%	16.2%
	No school	3.6%	9.8%
	Chi-square = 111.35 $df = 6$ $p < 0.01$		
<b>Work</b>	Working	45.5%	56.5%
	Unemployed	12.2%	24.5%
	Students	36.9%	18.7%
	Retired	5.5%	0.3%
	Chi-square = 122.63 $df = 3$ $p < 0.01$		

Note.  $df$  = degree of freedom.

group. In general, the level of educational attainment was higher in the native group. Regarding work, most of the native sample were studying, whereas most of the immigrant sample were working or looking for work.

### Procedure

Data were collected using a random route sampling and survey methodology. Boundaries were established for each of the neighbourhoods selected, and random route sampling was used to designate the blocks, streets, sidewalks, etc., in each neighbourhood. Carefully trained interviewers administered the surveys. The surveys were collected in Malaga city in the 10 districts into which the city is divided and in the 10 municipalities of Malaga province with the greatest concentration of immigrants. The questionnaires applied to the non-Spanish-speaking immigrants were translated into their language of origin by native speakers who also had a full command of Spanish. The surveys were conducted in neighbourhood associations, immigrant associations, and Social Service Centres located in each district and municipality.

The natives were interviewed in the respondent's household (61%), neighbourhood associations (20%), and Social Service Centres (19%). The immigrants were interviewed in the respondent's household (59%), immigrant associations (21%), and Social Service Centres (20%).

### Measures

**Demographic information.** The participants were asked to indicate their gender, age, ethnic identity, marital status, educational achievements, current occupation, and number of years living in the neighbourhood.

**Table 2. Sense of Community and Life Satisfaction Among the Native and Immigrant Population (Mean and Standard Deviations)**

Origin	Sense of community			Life satisfaction		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Native	3.16	0.75	946	5.12	1.12	946
Immigrant	3.20	0.88	700	4.55	1.36	700
Total	3.18	0.81	1646	4.88	1.26	1646

Note. *M* = mean; *SD* = standard deviation.

*Brief Sense of Community Scale (BSCS; Peterson, Speer, & McMillan, 2008)*. This is designed to assess the dimensions of needs fulfilment, group membership, influence, and emotional connection as defined in the McMillan and Chavis model (1986). It comprises an eight-item scale that uses a 5-point Likert-type response option format ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha for the overall BSCS was .85. Cronbach's alpha ranged from .80 to .86 for the versions translated into the languages of the immigrant groups.

*Satisfaction With Life Scale (SWLS; Pavot & Diener, 1993)*. The SWLS is designed to assess a person's global judgment of life satisfaction, which is theoretically predicted to depend on a comparison of life circumstances to one's standards. It assesses the positive side of the individual's experience rather than focusing on unpleasant emotions. The 5 items are answered on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's alpha for the overall SWLS was .87. Cronbach's alpha ranged from .75 to .87 for the versions translated into the languages of the immigrant groups.

## RESULTS

The Table 2 includes descriptive statistics for all study variables. There were two predictors or independent variables in this study—immigrant or native origin and the respondent's SOC—and one dependent variable—SWL. A necessary condition was that the two independent variables were genuinely independent. To test this, an analysis of variance (ANOVA) was performed to confirm whether there were differences in SOC between the native and immigrant populations; no statistically significant differences were found in SOC,  $F(1, 1647) = 0.718, p = .40, \eta^2 < .001$ , between natives ( $M = 3.16, SD = .75$ ) and immigrants ( $M = 3.20, SD = .88$ ).

This study analyzes the interaction between a dichotomous variable (immigrant status) and a continuous variable (SOC). Different methods exist to test this interaction (Jaccard, Turrisi, & Wan, 1990; Jaccard & Wan, 1996). According to these authors, a strategy commonly used in the social science literature to test for such interaction effects is to dichotomize the continuous variable (SOC in this case) using median splits (or some other cutting rule) and then to conduct a traditional analysis of variance. Another strategy is to compute the slopes for SWL and SOC for each of the two groups (immigrant vs. native). The results of applying the two strategies are shown below.

In the first strategy, we decided to divide the SOC variable into three equal groups based on two cutoff points at the 33.33rd and 66.66th percentiles. Using the scores of the SOC variable, three SOC levels were subsequently established: low (values less than

**Table 3.** Life satisfaction Among the Native and Immigrant Population Across the Three Levels of Sense of Community (Mean and Standard Deviations)

Origin	Sense of community	M	SD	N
Native	Low	4.89	1.22	314
	Medium	5.19	1.02	345
	High	5.30	1.08	287
	Total	5.12	1.12	946
Immigrant	Low	3.83	1.39	249
	Medium	4.56	1.12	189
	High	5.22	1.12	262
	Total	4.55	1.36	700
Total	Low	4.42	1.40	563
	Medium	4.96	1.10	534
	High	5.26	1.10	549
	Total	4.88	1.26	1646

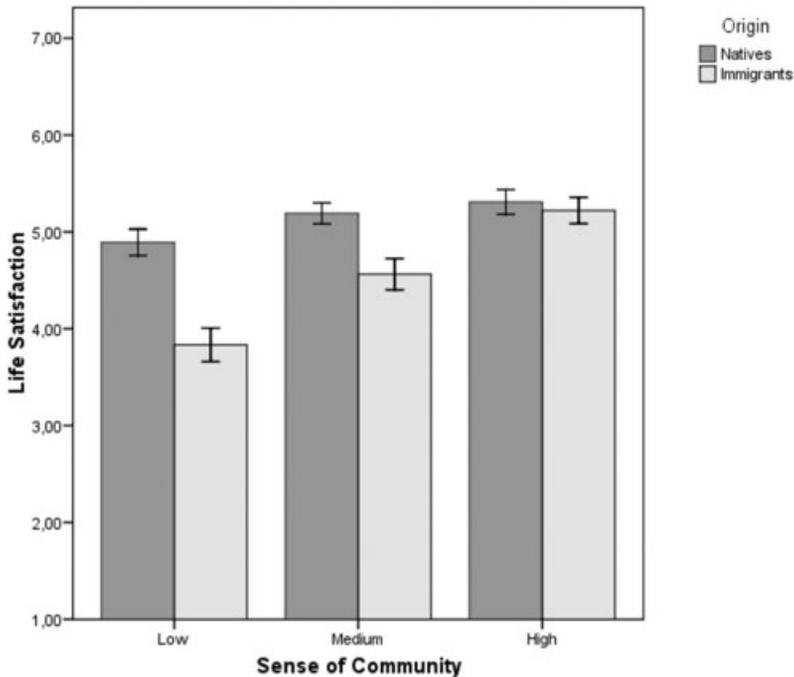
Note. M = mean; SD = standard deviation.

2.87), medium (values between 2.87 and 3.62), and high (values more than 3.62). Thus, we obtained a  $2 \times 3$  factorial design with two independent variables: origin (immigrant vs. native) and SOC with three levels (low, medium and high); SWL was the dependent variable.

An ANOVA was performed using origin and SOC as independent variables and SWL as the dependent variable. The independent variable associated with origins had two levels: native and immigrants; the independent variable SOC had three levels: high, medium, and low. The results are shown in Table 3. Significant differences were found between natives and immigrants,  $F(1, 1640) = 102.472, p < .001, \eta^2 = 0.059$ ; the residents expressed significantly more SWL. Regarding SOC, the differences were also significant,  $F(2, 1640) = 83.35, p < .001, \eta^2 = .092$ . Based on these significant results, we proceeded to conduct a post hoc analysis using the Bonferroni test to correct the effect of the quantity of estimations carried out, with significance level of  $p < .05$ . This analysis indicated that the people with greater SOC presented higher SWL than those with a low SOC (mean differences = .902,  $p < .001$ ), or medium SOC (mean differences = .388,  $p < .001$ ). There was also a difference between medium- and low-level SOC (mean difference = .514,  $p < .001$ ). People with greater SOC were those with greater SWL; as the former decreased so did SWL (see Table 3).

The differences were also significant regarding the origin  $\times$  SOC interaction,  $F(2, 1640) = 24.02, p < .001, \eta^2 = .028$ . The Bonferroni multiple comparison test showed that SWL was greater among natives than among immigrants when the level of SOC was high (mean difference = 1.06,  $p < .001$ ), and when the level of SOC was medium, although the difference was lower (mean difference = .63,  $p < .001$ ). However, when the SOC was high no significant statistical differences in SWL was found between the two groups (mean difference = .09,  $p = .37$ ; see Figure 1).

In the second strategy, we conducted a multiple regression analysis using the LISREL 8 software package. We used the nested goodness-of-fit strategy to analyze the moderating effects of the place of origin of the participants (Jaccard & Wan, 1996). The analysis consisted of two stages: in the first stage, we calculated the model fit by means of a chi-square test using a multiple group solution in which the structural parameters were estimated for natives and immigrants with no across-group constraints. The results indicate



**Figure 1.** Life satisfaction among the immigrant and native population according to their sense of community.

that although SOC is a good predictor of happiness in the native group ( $\beta = 0.16$ ,  $p < 0.01$ ), SOC is an even better predictor of happiness in the immigrant group ( $\beta = 0.51$ ,  $p < 0.01$ ).

Following Jaccard and Wan's procedure, we calculated a new model, identical to the first, but where an equality constraint is imposed on the regression coefficients between natives and immigrants (with an across-group constraint imposed to reflect the interaction effect). There was a statistically significant difference (chi-square 28.28, 1 degree of freedom) between the first and the second model. This indicates that the restriction placed on the second model is not viable and thus there is an interaction effect. The SOC has a stronger positive effect on SWL in the group of immigrants than among the native group.

We conducted three regression analyses to test whether the stronger effect of the SOC on SWL was consistent across the Latin American, African, and East European immigrant groups. There was a very positive association between the SOC and SWL in the Latin American group ( $\beta = 0.45$ ,  $p < 0.01$ ). This association was much stronger in the African group ( $\beta = 0.61$ ,  $p < 0.01$ ), and slightly weaker in the East European group ( $\beta = 0.31$ ,  $p < 0.01$ ).

## DISCUSSION AND CONCLUSIONS

These findings are consistent with previous studies that show a positive association between SOC and well-being (Davidson & Cotter 1991; Farrell, Aubry, & Coulombe, 2004). People with a greater SOC are more satisfied with life. This is supported by many studies (e.g.,

Baker & Palmer, 2006; Foruria et al., 2004; Kutek, Turnbull, & Fairweather-Schmidt, 2011; Mak, Cheung, & Law, 2009).

Significant differences in SWL were also found between the immigrant and native population—the immigrants reported lower levels of life satisfaction—which is consistent with the majority of studies (e.g., Vieno et al., 2009).

Regarding the main hypothesis, it was confirmed that SWL is higher among natives than immigrants when the level of SOC in both groups is low; however, when SOC is high in both groups, there are no statistically significant differences in SWL between them. This means that immigrants with a high SOC show a level of SWL similar to that of the native population. We conclude that SOC is key to immigrants becoming socially integrated and is directly related to SWL.

The phenomenon of immigration, which is widespread at a global level, involves a change in the people involved. Migration is a stressful life event that disrupts daily routines. It is often accompanied by significant changes in the social and family context, involving abandoning old social networks and creating new ones. Furthermore, migration leads to feelings of anxiety and uncertainty, a loss of control and social status, decreased social support, and a weakened SOC. The decreased SWL among immigrants has often been explained by the negative effect of the migration process on individuals. The lack of resources to cover their basic needs, perceived rejection, and feelings of fear, etc., often prevents them from becoming integrated in the host society, and thus individuals enter a feedback loop of exclusion that is hard to break. This situation and other factors, such as loneliness, separation from loved ones, or a sense of failure, are stressors that cause emotional distress and a decreased sense of well-being in the immigrant. The term acculturation stress refers to this particular type of stress, in which the stressors have their origin in the acculturation process. Immigrants must implement the coping strategies needed to restore their daily routines and reduce adverse emotional states (Atxótegui, 2002).

The data from this study suggest that SOC is a moderating variable that buffers the effects of acculturation stress experienced by immigrants in a new country. Some studies on the perception of support have also confirmed the moderating role of social support on immigrant well-being (e.g., Martínez, Garcia, & Maya, 2001; Olstad, Sexton, & Sjøgaard, 2001; Tartakovsky, 2007). This confirms that the development of positive social interactions through the SOC and social networking improves the well-being of immigrants. The results of this study also show that the SOC and acculturation stress are independent concepts given that there were no differences between immigrants and natives in the SOC. Nevertheless, for all groups of immigrants, a strong SOC acts as a buffer against the stress of being an immigrant. However, among the native population, the relationship between the SOC and life satisfaction was less strong. Among African immigrants the SOC is closely associated with life satisfaction. This association is slightly weaker among Latin Americans and lower among East European immigrants.

This finding is almost certainly related to those of other authors (Basabe, Zoblina, & Paez, 2004; Bathum & Baumann, 2007), who suggest that there are collectivist cultures, such as those found in Africa and Latin America, which place more importance on support networks and in which the SOC and friendships determine how the world is perceived. This contrasts with more individualistic cultures, such as those found in Europe.

Although most studies show that immigrants perceive significantly less well-being than natives in the host society, other studies have not found any differences and have concluded that immigrants experiencing positive interactions with the host society do not show significant differences in life satisfaction compared with the native population (Misajon & Cummins, 1999). Foroughi, Misajon, and Cummins (2001) also suggest that

social integration in the wider community and the degree of interaction with people may explain these results.

The data from our study show that overall SWL among the Spanish local population is higher than immigrant SWL. However, only when the interaction between origin and SOC levels is analyzed do the results show that the variable moderating SWL is SOC. This may have important implications regarding future interventions with immigrants, given that encouraging SOC may benefit their SWL.

It should also be noted that although immigrants in the host country have to rebuild their support networks and build new connections, the results confirm that immigrants develop SOC and adapt to changes. It is likely that the characteristics of their setting help them to adapt faster because of the host society supporting immigrant integration, as noted by some authors (e.g., Foroughi et al., 2001; Misajon, & Cummins, 1999). In this sense it should be noted that the study took place in Malaga, Spain, which is a highly multicultural setting and one of the Spanish provinces with a higher rate of immigrants. It also has a long-established reputation as a tourist destination which has made coexistence with foreigners a common phenomenon and is a society open to cultural diversity. This study highlights the relevance of SOC to SWL, especially in the immigrant population. It would therefore be of interest to design studies on the well-being of immigrants using a multidimensional analysis that included economic status, employment, individual characteristics, and interpersonal relationships in the new social setting.

Although the cross-sectional nature of the present study precludes establishing causality, the findings point to the relevance of SOC to SWL. Future research should analyze the interaction of these variables over time. Based on our results, a longitudinal study analyzing the relationship between rebuilding the SOC in the new context and increased life satisfaction would deepen our understanding of the role of the SOC in the migration process. It would also be of interest to analyze the variables that lead to the development of a stronger SOC and to study the SOC and SWL in other contexts, such as rural areas or regions with low levels of multiculturalism.

These results are of great relevance to planning effective social interventions that facilitate immigrant integration based on the SOC. Integration strategies are required that promote intercultural relations and improve intercultural communication. The SOC has a strong relationship with life satisfaction in both populations, but when we focus on the immigrant population alone, we find that this relationship is even stronger. Thus, social policies should be geared toward developing interventions that promote sociocultural adaptation, thus contributing to psychological adjustment and increasing well-being in the immigrant population.

Bearing in mind its limitations, our study is one of the first studies to empirically examine SOC in immigrant and native populations in a Spanish city with a high rate of immigration. The findings provide a reference point for future researchers to examine this important concept in both populations and to conduct transnational studies to investigate whether these results can be generalized.

## REFERENCES

- Atxótegui, J. (2002). *La depresión en los inmigrantes: una perspectiva transcultural*. Barcelona, Spain: Ediciones Mayo.
- Amit, K. (2010). Determinants of life satisfaction among immigrants from Western countries and from the FSU in Israel. *Social Indicators Research*, 96, 515–534.

- Amit, K., & Litwin, H. (2010). The subjective well-being of immigrants aged 50 and older in Israel. *Social Indicators Research*, 98, 89–104.
- Anson, O., Pilpel, D., & Rolnik, V. (1996). Physical and psychological well-being among immigrant referrals to colonoscopy. *Social Science and Medicine*, 43, 1309–16.
- Baker, D. A., & Palmer, R. J. (2006). Examining the effects of perceptions of community and recreation participation on quality of life. *Social Indicators Research*, 75, 395–418.
- Basabe, N., Zlobina, A., & Páez, D. (2004). Integración socio-cultural y adaptación psicológica de los inmigrantes extranjeros en el País Vasco. *Cuadernos Sociológicos Vascos (Socio-cultural integration and psychological adaptation of immigrants in the Basque Country)*, n° 15. Vitoria, Spain: Gobierno Vasco.
- Bathum, M. E., & Baumann, L. (2007). A sense of community among immigrant Latinas. *Family and Community Health*, 30, 167–177.
- Beirens, K., & Fontaine, J. R. (2011). Somatic and emotional well-being among Turkish immigrants in Belgium: Acculturation or culture? *Journal of Cross-Cultural Psychology*, 42, 56–74.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46, 5–34.
- Bishop, B. Colquhoun, S., & Johnson, G. (2006). Psychological sense of community: An Australian aboriginal experience. *Journal of Community Psychology*, 34, 1–7.
- Cantillon, D., Davidson, W. S., & Schweitzer, J. H. (2003). Measuring community social organization: Sense of community as a mediator in social disorganization theory. *Journal of Criminal Justice*, 31, 321–339.
- Chavis, D. M. (1983). Sense of community in the urban environment: Benefits for human and neighbourhood development. *Dissertation Abstracts International*, 45, 03B, 1058.
- Chavis, D. M., Hogge, J. H., McMillan, D. W., & Wandersman, A. (1986). Sense of community through Brunswick's lens: A first look. *Journal of Community Psychology*, 14 (1), 24–40.
- Chavis, D. M., & Pretty, G. (1999). Sense of community: Advances in measurement and application. *Journal of Community Psychology*, 27 (6), 635–642.
- Cheng, C. (1997). Role of perceived social support on depression in Chinese adolescents: A prospective study examining the buffering model. *Journal of Applied Social Psychology*, 27, 800–820.
- Cooper, H., Okamura, L., & Gurka, V. (1992). Social activity and subjective well-being. *Personality and Individual Differences*, 13, 573–583.
- Davidson, W., & Cotter, P. (1991). The relationship between sense of community and subjective well-being: A first look. *Journal of Community Psychology*, 19, 246–253.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Downie, M., Ning Chua, S., Koestner, R., Barrios, M. F., Rip, B., & M´Birkou, S. (2007). The relations of parental autonomy support to cultural internalization and well-being of immigrants and Sojourners. *Cultural Diversity and Ethnic Minority Psychology*, 13, 241–249.
- Farrell, S., Aubry, T., & Coulombe, D. (2004). Neighbourhoods and neighbors: do they contribute to personal well-being? *Journal of Community Psychology*, 32, 9–25.
- Finch, B. K. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health*, 5, 109–117.
- Fisher, A. T., & Sonn, C. C. (2002). Psychological sense of community in Australia and the challenges of change. *Journal of Community Psychology*, 30, 597–609.
- Foroughi, E., Misajon, R., & Cummins, R. A. (2001). The relationships between migration, social support, and social integration on quality of life. *Behaviour Change*, 18, 156–167.

- Foruria, A. M., Mitchell, S. H., Jones, D. G., Tadlock, H. L., Weakly, D. L., & McDonald, T. W. (2004, April). Factors influencing neighborhood quality of life in a citywide sample. Poster presented at the annual meeting of the Western Psychological Association in Phoenix, AZ.
- Giménez, C., & Pérez, C. (2003). La integración de los menores de origen extranjero en la Comunidad de Madrid: necesidades derechos y actuaciones (Social integration of immigrant children in the Community of Madrid: needs, rights, and actions). *En Asamblea de Madrid y Defensor del Menor: Estudios e Investigaciones*.
- Golding, J. M., & Burnam, M. A. (1990). Stress and social support as predictors of depressive symptoms in Mexican Americans and non-Hispanic Whites. *Journal of Social and Clinical Psychology*, 9, 268–286.
- Hao, L., & Johnson, R. (2000). The economic, social and cultural origins of emotional well-being: Comparison of immigrants and natives at midlife. *Research on Aging*, 22, 599–629.
- Herrero, J., Fuente, A., & Gracia, E. (2011). Covariates of subjective well-being among Latin Americans immigrants in Spain: The role of social integration in the community. *Journal of Community Psychology*, 39, 761–775.
- Hill, L. (1996). Psychological sense of community: suggestions for further research. *Journal of Community Psychology*, 24, 431–438.
- Hombrados-Mendieta, I., Gomez-Jacinto, L., & Dominguez-Fuentes, J. M. (2009). The impact of immigrants on the sense of community. *Journal of Community Psychology*, 37, 671–683.
- Jaccard, J., Turrisi, R., & Wan, C. K. (1990). *Interaction effects in multiple regression*. Thousand Oaks, CA: Sage.
- Jaccard, J., & Wan, C. K. (1996). *LISREL Approaches to interaction effects in multiple regression*. Thousand Oaks, CA: Sage.
- Jasinskaja-Lahti, I., & Liebkind, K. (2007). A structural model of acculturation and well-being among immigrants from the Former USSR in Finland. *European Psychologist*, 12, 80–92.
- Jibeen, T., & Khalid, R. (2010). Predictors of psychological well-being of Pakistani immigrants in Toronto, Canada. *International Journal of Intercultural Relations*, 34, 452–464.
- Kutek, S., Turnbull, D., & Fairweather-Schmidt, K. (2011). Rural men's subjective well-being and the role of social support and sense of community: Evidence for the potential benefit of enhancing informal networks. *The Australian Journal of Rural Health*, 19, 20–26.
- Lam, A. M., Tsoi, K. W., & Chan, T. S. (2005). Adolescent Chinese immigrants in Hong Kong: A comparison with locally born students and factors associated with their psychological well-being. *International Journal of Adolescent Medicine and Health*, 17, 157–168.
- Leslie, L. A. (1992). The role of informal support networks in the adjustment of Central American immigrant families. *Journal of Community Psychology*, 20, 243–256.
- Lester, L. H. (2005). Immigrants satisfaction: What is it? Does it matter? NILS Working Paper, 154, 2–103.
- Lorion, R. P., & Newbrough, J. R. (1996). Psychological sense of community: The pursuit of a field's spirit. *Journal of Community Psychology*, 24, 311–314.
- Mak, W., Cheung, R., & Law, L. (2009). Sense of community in Hong Kong: Relations with community-level characteristics and residents' well-being. *American Journal of Community Psychology*, 44, 80–92.
- Málaga Council. (2012). Población extranjera. Retrieved from <http://www.Gestrisam.malaga.eu>
- Malone, M. E., & Dooley, J. P. (2006). Meanings of "community" and sense of community for two generations of Irish people living in North-West London. *Community, Work and Family*, 9, 11–28.
- Martínez, M., García M., & Maya, I. (2001). El efecto amortiguador del apoyo social sobre la depresión en un colectivo de inmigrantes (The buffering effect of social support on the depression in a group of immigrants). *Psicothema*, 13, 605–610.

- Massey, D., & Redstone, I. (2006). Immigrant intentions and mobility in a global economy: The attitudes and behavior of recently arrived U.S. immigrants. *Social Science Quarterly*, 87, 954–971.
- McMichael, C., & Manderson, L. (2004). Somali women and well-being: social networks and social capital among immigrant women in Australia. *Human Organization*, 63, 88–99.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *American Journal of Community Psychology*, 14 (1), 6–23.
- Migration and migrant population statistics (2009). Retrieved from [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Migration\\_and\\_migrant\\_population\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Migration_and_migrant_population_statistics)
- Misajon, R., & Cummins, R. A. (1999). Subjective quality of life among Filipino-Australians. *Social Research and Social Change*, 6, 31–52.
- Mui, A. C. (2001). Stress, coping and depression among elderly Korean immigrants. *Journal of Human Behavior in the Social Environment*, 3(3–4), 281–299.
- Neto, F. (2001). Satisfaction with life among adolescents from immigrant families in Portugal. *Journal of Youth and adolescence*, 30(1), 53–67.
- Olstad, R., Sexton, H., & Søggaard, J. (2001). The Finnmark Study. A prospective population study of the social support buffer hypothesis, specific stressors and mental distress. *Social Psychiatry and Psychiatric Epidemiology*, 36, 582–89.
- Ortiz, V., & Arce, C. H. (1986). Quality of life among persons of Mexican descent. In F. M. Andrews (Ed.), *Research on the quality of life* (pp. 171–191). Ann Arbor, MI: University Research Center.
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological assessment*, 5, 164–172.
- Permanent Observatory for Immigration Report. (2012). Informe del Observatorio Permanente de la Inmigración (Report from the Permanent Immigration Observatory). Madrid, Spain: Ministerio de Empleo y Seguridad Social.
- Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community. *Journal of Community Psychology*, 36(1), 61–73.
- Safi, M. (2010). Immigrants' life satisfaction in Europe: Between assimilation and discrimination. *European Sociological Review*, 26(2), 159–176.
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology*. San Francisco, CA: Jossey-Bass.
- Shen, B. J., & Takeuchi, D. T. (2001). A structural model of acculturation and mental health status among Chinese Americans. *American Journal of Community Psychology*, 29, 387–418.
- Silveira, E., Skoog, I., Sundh, V., Allebeck, P., & Steen, B. (2002). Health and well-being among 70-year-old migrants living in Sweden—Results from the H 70 gerontological and geriatric population studies in Göteborg. *Social Psychiatry and Psychiatric Epidemiology*, 37(1), 13–22.
- Sonn, C. (2002). Immigrant adaptation—understanding the process through sense of community. In A. Fischer, C. Sonn, & B. Bishop (Eds.), *Psychological sense of community: Research, applications, and implications* (pp. 87–108). New York, NY: Kluwer Academic Plenum Publishers.
- Tartakovsky, E. (2007). A longitudinal study of acculturative stress and homesickness: High-school adolescents immigrating from Russia and Ukraine to Israel without parents. *Social Psychiatry and Psychiatric Epidemiology*, 41(6), 485–494.
- United Nations Department of Economic and Social Affairs (2010). Retrieved from <http://www.un.org/esa/population/publications/publications.htm>
- Vega, W. A., Kolody, B., Valle, R., & Weir, J. (1991). Social networks, social support and their relationship to depression among immigrant Mexican women. *Human Organization*, 50, 154–162.

- Verkuyten, M. (1994). Ethnic self-identification and psychological well-being among minority youth in the Netherlands. *International Journal of Adolescence and Youth*, 5, 19–34.
- Vieno, A., Santinello, M., Lenzi, M., Baldassari, D., & Mirandola, M. (2009). Health status in immigrants and native early adolescents in Italy. *Journal of Community Health*, 34, 181–187.
- Zarza, M. J., & Sobrino, M. J. (2007). Estrés de adaptación sociocultural en inmigrantes latinoamericanos residentes en Estados Unidos vs España: Una revisión bibliográfica (Acculturation Stress among Latin American Immigrants Residing in the United States vs. Spain: A Literature Review). *Anales de Psicología*, 23, 72–84.