Acculturation, Adaptation and Loneliness among Brazilian Migrants Living in Portugal

Joana Neto, Eliany Nazaré Oliveira and Félix Neto

Abstract

Acculturation refers to the changes that individuals undergo following intercultural contact. Adaptation is the long-term outcome of the process of acculturation, and loneliness represents one indicator of negative psychological adaptation. This study, using acculturation strategies, looks to answer to four questions: (1) what is the relationship between intercultural strategies and loneliness? (2) What influence does cultural identity have on the loneliness of migrants? (3) What influence does perceived discrimination have on the loneliness of migrants? and (4) what influences do self-worth and perceptions of others have on the loneliness? Answering these questions is important for reducing migrants’ loneliness. This study, carried out in 2012, is constituted by 258 Brazilian migrants in Portugal (53% females and 47% males) with a mean age of 36 years. The mean length of residence in Portugal was 14 years. In order to measure loneliness, we used the ULS-6 scale. Other scales were used to measure intercultural strategies, cultural identity, perceived discrimination, self-esteem and attitudes towards ethnocultural groups. As predicted, in what concerns intercultural strategies, loneliness was negatively associated with the strategy of integration, and positively associated with assimilation, separation and marginalization. Ethnic identity was negatively associated with loneliness, but, contrary to expectations, national identity was positively associated with loneliness. Perceived discrimination predicted positively loneliness. Finally, as expected, self-esteem and perceptions of the in-group predicted negatively loneliness. Implications of the study are discussed.

Keywords: acculturation, adaptation, Brazilian migrants, loneliness, Portugal
1. Introduction

Social scientists have conceptualized the phenomena arising from intercultural contacts under the field of acculturation [1]. Acculturation represents one of the main topics of research in cross-cultural psychology [2]. Adaptation is the long-term outcome of the process of acculturation, and it is highly variable, ranging from well- to poorly-adapted. Adaptation can assume two forms: psychological adaptation and sociocultural adaptation [2]. The former is sometimes referred as ‘feeling well’; the latter refers to ‘doing well’ in activities of daily intercultural living. Loneliness can be considered as an indicator of negative psychological adaptation [3].

Aristotle’s remark about the significance of positive interpersonal relations holds in the era of globalization as well as in the ancient Greece. Loneliness is experienced in every culture, as displayed by researchers with various cultural samples including Canadians and Portuguese [4], Chinese Canadians [5], Angolans [6], British [7] and Turks [8]. Loneliness is experienced in every stage of the lifespan, even in 5-year-old children [9]. Loneliness affects both young people (e.g., [8, 10, 11]) and older migrants (e.g., [12, 13]). For individuals in Western societies, loneliness seems to follow a U-shaped distribution, whereby adolescents/young adults (<25 years old) and older adults (>65 years old) have higher rates of loneliness than adults in the middle-age spectrum [7].

Extant literature calls our attention to the diffuse and adverse outcomes of loneliness [14]. In particular, immigration provides a unique opportunity to study loneliness. According to Ponizovski and Ritsner [15] ‘newly immigrated persons find themselves in a drastically different network of social relationships and experience multiple stressors, including losses’ (p. 408). However, contrary to what might be expected, the research of loneliness among migrants is scarce [3]. The main purpose of this research is to provide some insights into the experiences of loneliness among Brazilian migrants living in Portugal.

1.1. Brazilians living in Portugal

Currently, migration from Brazil is one of the largest immigration flows to Portugal. In 2014, this flow represented 22% of the foreign population resident in the country [16]. Although relations between these two countries are not a new phenomenon, the patterns of migration have changed over time. Despite the fact that Portugal used to be traditionally an emigration country, from the last quarter of the twentieth century, Portugal has become a mixed migratory pattern country. Presently, there are numerous Portuguese-speaking migrants, who are mostly from Brazil and Cape Verde, but other population groups became also numerous, such as Eastern European and China migrants [16].

The immigration from Brazil to Portugal started to rise in mid-1990. According to foreign registration statistics, only 7470 Brazilian immigrants resided in Portugal in 1989. However, in 2008, this foreign population exceeded 100,000 migrants and augmented to 119,363 in 2010. This period of time was clearly characterized by the labour migration caused by the progressive opening of the economy and the perception of imbalances in the structure of the Portuguese labour market. Many Brazilian immigrants work in low-skilled jobs, in sectors
such as industry, construction, agriculture, services and tourism. When the financial and economic recession struck Portugal, many Brazilian workers, who had been employed in these sectors, lost their jobs. The precarious work has made Brazilian migrants extremely vulnerable to economic fluctuations and susceptible to unemployment. Despite the economic crisis creating a decrease of the foreign-resident population comparatively to previous years, in 2014, 87,493 Brazilians lived in Portugal [16].

According to official statistics [16], concerning the gender, there is a female predominance, with a percentage difference of 22.4%. Regarding the age, there is a concentration in the economically active age groups. And, concerning the geographic distribution, most of the migrants are located above all along the coast line.

In order to deal with this new Portuguese migratory reality, the government’s policies on immigration have undergone serious changes in terms of integration's policies, access to citizenship and regulation of flows. The pro-assimilationist discourse remains in the past and the new migration’s political agenda is based on multiculturalism. According to the Migrant Integration Policy Index (MIPEX IV), Portugal has the second-most favourable integration policies in the developed world.

1.2. Loneliness and the migratory process

‘Social transitions are a basic fact of modern life, and so is loneliness’ ([17], p. 1). Diverse definitions of this phenomenon have been advanced and most definitions of loneliness emphasize perceived deficits in relationships. For instance, Ascher and Paquette [18] define loneliness as ‘the cognitive awareness of a deficiency in one’s social and personal relationships, and ensuring affective reactions of sadness, emptiness, or longing’ (p. 75).

Loneliness is a psychological state, constituted by a set of cognitions and discomfort emotions which appear in reaction to the threatened loss of a person’s social and affective bonds [19]. In fact, the scientific literature identifies two components related to loneliness: (a) a cognitive component, which compares the desired and the real social and affective relations quantitatively and qualitatively, and (b) an affective component involving negative emotional experiences such as sadness, emptiness, longing, disorientation or feeling lost among others.

Loneliness is not synonymous with being alone [20]. Loneliness is a state of mind rather than an objective condition. As observed by Peplau and Perlman [17] ‘Loneliness is a subjective experience, it is not synonymous with objective social isolation. People can be alone without being lonely or lonely in the crowd’ (p. 3). For example, it is possible to have many friends or an amorous relationship, and still feel lonely. Therefore, research on loneliness has mainly been evaluated through self-report measures that approach people’s perceptions of their feelings [21].

The identification of the factors, which contribute to loneliness, is relevant for diverse motives, such as its relationship with low physical activity [22], poor academic competence and performance [23], unmet intimacy needs [24], health outcomes such as increment in hypertension [25], sleep disturbance [26] and mental health problems [26]. For instance, a relation between
loneliness, depressive symptoms, anxiety and suicidal ideation was found [27, 28]. Literature indicates that loneliness provides an increased risk of not only morbidity but also mortality later in life [29].

Many changes may occur as a result of migration [1] and these changes may impact on experienced loneliness by migrants. Some literature points out that migrants may be prone to loneliness as they are a target of discrimination [30]. However, there are studies that do not report differences in loneliness between migrants and native people from the societies of origin and of residence. For example, Portuguese youths living in France and Portuguese youths without migratory experience revealed no differences in loneliness [31]. Similar findings were shown among Portuguese migrants living in Switzerland [32], and among Angolan, Cape Verdean and Indian youths of immigrant backgrounds residing in Portugal [33]. A recent study even found that Portuguese youths returned with their migrant families from France displayed lower loneliness than native Portuguese who have never migrated [3]. In this vein, Fuligni [34] has reported: ‘Some immigrant children show similar or better development outcomes than their American-born counterparts than would be expected because of their socioeconomic background and status as newcomers in American society’ (pp. 299–300). Thus, several researches showed that not all migrants do evidence psychological disadvantages due to the intercultural contact.

1.3. The present study

The purpose of this study is to examine the relationship between loneliness and acculturation strategies, cultural identity, perceived discrimination, self-worth and social perceptions.

In the course of acculturation, migrants face new styles of living. Cultural identity and perceived discrimination are generally seen as core aspects of acculturation [33, 35, 36]. To examine the relationship between acculturation and loneliness, we used Berry’s model [1] of acculturation strategies. Acculturation strategies indicate how the migrants wish to live interculturally in the settlement country after immigration [1] and these strategies are grounded in two basic intercultural dimensions: maintenance of one’s cultural heritage (‘culture maintenance’) and contact with others outside one’s group (‘cultural contact’). The intersection of these two dimensions, ‘cultural maintenance’ and ‘cultural contact’, results in four acculturation strategies, that is, assimilation, integration, separation and marginalization.

According to Berry et al. [1, 33, 35], assimilation refers to a migrant’s low interest in maintaining his/her own cultural identity and being interested in having daily interaction with other cultures. Separation refers to an individual’s interest in maintaining his/her own cultural identity and a low interest in having interaction with other cultures. Marginalization refers to little interest in one’s own cultural maintenance and in establishing interaction with others. Finally, most of the research suggests that integration is the most adaptive, whereas marginalization is associated with poor psychological adaptation; the two other acculturation strategies, assimilation and separation, are intermediate [33, 35, 37]. In Portugal, Neto [38] found that the integration strategy had a significant and positive link to psychological adaptation and sociocultural adaptation among young immigrants from Angola, Cape Verde, Guinea-Bissau, India, Mozambique, São-Tomé and East Timor. Nguyen and Benet-Martinez [39] performed...
a meta-analytic study. They reported that integration (‘biculturalism’ in their terms) was significantly related to both psychological adaptation and sociocultural adaptation.

In the current research, we explore whether the preference of the integration strategy by Brazilian migrants has greater benefits for their adaptation than their preferences for other acculturation strategies.

Cultural identity represents one domain of acculturation that focus on migrants’ sense of self, including both ethnic identity and national identity. Ethnic identity concerns their sense of belonging to the migrant ethnic group and national identity refers to their sense of belonging to the new society of settlement [35]. The great majority of studies about migration have approached only the ethnic identity; however, for migrants both ethnic identity and national identity are relevant [36]. A strong ethnic identity and national identity provides a sense of emotional stability, personal security and a good self-concept for migrants [36].

Cultural identity may have an important impact on loneliness. Investigation has evidenced a positive relation between cultural identity and adaptation. For example, both ethnic identity and national identity were positively associated with psychological adaptation in a large international study from 13 countries, including Portugal [35].

Besides acculturation strategies and cultural identity, we also analyse whether perceived discrimination exerts an influence on loneliness. Past research has examined whether perceived discrimination was related to psychological ill health [40]. The subjective interpretation of events as discriminatory may be positively related to loneliness [33, 39, 41].

Literature shows a consistent relation between loneliness and negative self-regard [42, 43]. Feeling lonely and experiencing low self-esteem are a common problem [44], especially in migrants [38]. Self-esteem includes feelings of personal worth [45]. Several theories (e.g., evolutionary theory and the cognitive discrepancy model) have acknowledged a relationship with self-esteem [44].

The feelings of loneliness tend to be linked not only to poor self-regard but also to negative social perceptions. For instance, lonely persons assessed interaction partners more negatively than non-lonely persons [46]. Similar findings for lonely persons’ negative views of others have also been shown outside the laboratory setting. For example, loneliness was related to negative views of others in classrooms [47], and in college students’ judgements of their roommates [48].

In the current research, we analyse the relation between loneliness and self-esteem, and how the migrants rate members of their own national group (in-group evaluation), members of other national groups, that is, individuals of the host society (Portuguese), and individuals of other national groups of migrants (out-group evaluations).

In summary, we tested five hypotheses derived from the aforementioned research:

Hypothesis 1: It is predicted that the integration strategy will be negatively associated with loneliness, and the assimilation, separation and marginalization strategies will be positively associated with loneliness.
Hypothesis 2: It is hypothesized that loneliness will be negatively predicted by ethnic identity and majority identity.

Hypothesis 3: It is expected that perceived discrimination will predict higher levels of loneliness.

Hypothesis 4: It is expected that self-esteem will predict negatively loneliness.

Hypothesis 5: It is hypothesized that perceptions of others will predict loneliness negatively, beyond self-esteem.

2. Method

2.1. Participants
The participants were 258 Brazilian migrants (121 men and 137 women). The migrants ranged in age from 18 to 60 years (\(M = 35.92\); standard deviation (SD) = 10.51). The mean length of residence was 14.33 years (SD = 9.59). Participants married constituted 48.8% of the sample, not married 50.0% and 1.2% of participants had not answered. Concerning employment, the main category was unskilled work (42%). Relative to the level of education, 41.8% had no secondary education, 39.9% had completed secondary education, 8.9% had attended tertiary education and 3.1% had not answered. Most of the migrants declared to be Roman Catholics (58.1%), and about a quarter declared that they have no religion.

2.2. Measures
For this study, we used the following measures:

Acculturation strategies. This scale consists of 16 items, grounded on the model of Berry [49, 50]. It evaluated four acculturation strategies (assimilation, integration, separation and marginalization), each one with four items. An example of an item assessing each of the acculturation strategies is as follows:

Assimilation: ‘I feel Brazilian should adapt to mainstream Portuguese society and not maintain their own traditions’;

Separation: ‘I prefer to have only Brazilian friends’;

Integration: ‘Brazilians should have both Brazilian and Portuguese friends’;

Marginalization: ‘I don’t want to attend either Portuguese or Brazilian social activities’.

Each item was assessed on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Cronbach’s alpha of assimilation, integration, separation and marginalization for the present research was 0.63, 0.66, 0.66 and 0.75, respectively. The internal consistencies were moderate; however, factor analyses on data from the 13 countries participating in the International Comparative Study of Ethnocultural Youth (ICSEY), including Portugal, showed that the scales were unifactorial and comparable across countries and across ethnocultural groups [35].
Cultural identity. Cultural identity was measured with a scale originally developed by Phinney et al. [36]. The scale assessed Brazilian identity with four items (Cronbach’s alpha, 0.94). A sample item is ‘I feel that I am part of Brazilian culture’. The other scale (four items) assessed Portuguese identity (Cronbach’s alpha, 0.94). A sample item is ‘I am happy that I am Portuguese’. Each item was rated on a five-point scale from 1 (strongly disagree) to 5 (strongly agree).

Perceived discrimination. This scale includes five items [35, 51] evaluating the direct experience of discrimination—negative or unfair treatment from others (e.g., ‘I have been teased or insulted because of my Brazilian background’). Each item was rated on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Cronbach’s alpha for the present study was 0.90.

Self-esteem. Self-esteem was assessed using the [52] 10-item inventory. Sample items are ‘On the whole I am satisfied with myself’ and ‘I have a positive attitude toward myself’. Each item was rated on a five-point scale from 1 (totally disagree) to 5 (totally agree). The scale was previously adapted into Portuguese [53]. Cronbach’s alpha for the current research was 0.72.

Attitudes towards ethnocultural groups. This measure was a version of the ‘feeling thermometer’, in which participants are presented with a scale of 1-100 and asked to indicate how favourable their attitude is towards immigrants coming from various countries (1 = extremely unfavourable, 100 = extremely favourable). Participants were asked to rate besides Brazilians and Portuguese, other 16 groups, including Angolans, Chinese and Cape Verdeans. Cronbach’s alpha showed that the scale to assess attitudes towards the other 16 groups had good reliability in this study (Cronbach’s alpha = 0.96).

Loneliness. The brief Portuguese version of the revised University of California, Los Angeles (UCLA) Loneliness Scale [54] was used [21, 55]. This is a six-item scale ULS-6. One sample item reads: ‘People are around me but not with me’. Migrants were asked to indicate how often they felt for each statement on a five-point scale ranging from 1 (never) to 4 (often). Cronbach’s alpha for the current research was 0.82.

Demographic information. The demographic questionnaire included the following: age, gender, place of birth, age at arrival in Portugal, marital status, level of education, occupation and religion.

2.3. Procedure
The recruitment of the participants was carried out in Lisbon Metropolitan area. The questionnaire was administered by two trained research assistants. The participation rate was high (about 75%). The respondents were informed about the goals and procedures of the study and they gave informed consent. The participants’ responses were anonymous. All questionnaires were administered in Portuguese. The questionnaire took approximately 25 min to complete. There were no rewards given for completing the questionnaire. All aspects of the research were in line with American Psychological Association (APA) ethical guidelines [56].
3. Results

Before testing our hypotheses, descriptive statistics for the study variables are presented (see Table 1), and a series of analyses were performed to explore potential relations between socio-demographic variables and loneliness. One-sample t-test showed that the mean score of migrants on loneliness ($M = 2.03$; $SD = 0.74$) was significantly below the scale midpoint of 2.50 ($p < 0.001$). Overall, this result suggests that migrants experienced a relatively slight level of loneliness. Also, one-sample t-tests showed that the average score of integration ($M = 3.68$; $SD = 0.73$) was significantly higher than the midpoint (3) of the scale ($p < 0.001$), while average scores on assimilation ($M = 2.61$; $SD = 0.71$), separation ($M = 2.68$; $SD = 0.76$) and marginalization ($M = 2.40$, $SD = 0.79$) were significantly lower than the midpoint of the scale (all $ps < 0.001$). These mean scores pointed to two clusters: integration was unequivocally on the preferred side, while assimilation, separation and marginalization were not preferred. Regarding cultural identity, the mean score of ethnic identity ($M = 4.47$; $SD = 0.93$) was significantly higher than the midpoint of the scale (3), while national identity ($M = 2.27$; $SD = 1.28$) was significantly lower than the midpoint. Overall, these results suggest that ethnic identity is more valued than national identity.

Now, we are going to present the relationships of loneliness in relation to socio-demographic variables such as age, gender, level of education and length of residence.

Age. Respondents were divided into two age groups: the young adults ranged in age from 18 to 34, and the middle-age adults (35–60 year olds). There were significant age differences across the adult lifespan, [$F(1, 255) = 4.75$, $p < 0.05$, $\eta^2 = 0.018$] on loneliness. The young adults ($M = 1.93$, $SD = 0.73$) felt less loneliness than the middle-age adults ($M = 2.13$, $SD = 0.75$).

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M$</th>
<th>SD</th>
<th>Number of items</th>
<th>Cronbach’s $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assimilation</td>
<td>2.61</td>
<td>0.71</td>
<td>4</td>
<td>0.63</td>
</tr>
<tr>
<td>Integration</td>
<td>3.68</td>
<td>0.73</td>
<td>4</td>
<td>0.66</td>
</tr>
<tr>
<td>Separation</td>
<td>2.68</td>
<td>0.76</td>
<td>4</td>
<td>0.66</td>
</tr>
<tr>
<td>Marginalization</td>
<td>2.40</td>
<td>0.79</td>
<td>4</td>
<td>0.75</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>4.47</td>
<td>0.93</td>
<td>4</td>
<td>0.94</td>
</tr>
<tr>
<td>National identity</td>
<td>2.27</td>
<td>1.28</td>
<td>4</td>
<td>0.94</td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>2.15</td>
<td>1.09</td>
<td>5</td>
<td>0.90</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.83</td>
<td>0.72</td>
<td>10</td>
<td>0.72</td>
</tr>
<tr>
<td>Attitudes towards Brazilians</td>
<td>9.71</td>
<td>1.06</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Attitudes towards Portuguese</td>
<td>7.69</td>
<td>3.03</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Attitudes towards other migrants</td>
<td>3.91</td>
<td>2.34</td>
<td>16</td>
<td>0.96</td>
</tr>
<tr>
<td>Loneliness</td>
<td>2.03</td>
<td>0.74</td>
<td>6</td>
<td>0.82</td>
</tr>
</tbody>
</table>

*Table 1.* Means, standard deviations and reliability coefficients of the measures for the Brazilian migrants ($N = 258$).
Gender. There were no differences between men \((M = 2.00, SD = 0.76)\) and women \((M = 2.06, SD = 0.73)\), \([F(1, 255) = 1.35, p > 0.05, \eta^2 = 0.001]\) on loneliness.

Education. There were no differences in the level of education for participants who have not completed secondary schooling \((M = 2.12, SD = 0.72)\) and those who completed secondary schooling or tertiary education \((M = 1.94, SD = 0.77)\), \([F(1, 247) = 0.3.80, p > 0.05, \eta^2 = 0.016]\) on loneliness.

Concerning the length of residence, participants were divided into two groups: those with 10 years or less of length of residence in Portugal and those with more than 10 years. In relation to loneliness, there were no differences between participants with a shorter length of residence \((M = 1.94, SD = 0.74)\) and those with a longer length of residence \((M = 2.09; SD = 0.74)\), \([F(1, 255) = 0.2.57, p > 0.05, \eta^2 = 0.010]\).

Pearson product-moment correlations between loneliness and intercultural strategies were performed in order to test hypothesis 1 (see Table 2). As expected, integration was negatively correlated with loneliness \((r = -0.16, p < 0.05)\), while assimilation \((r = 0.42, p < 0.001)\), separation \((r = 0.22, p < 0.01)\) and marginalization \((r = 0.48, p < 0.001)\), were positively correlated with loneliness. These findings confirm our first hypothesis.

In order to test whether cultural identity predicts loneliness, we performed a hierarchical multiple regression. Prior to performing the regression analysis, collinearity diagnostics were analysed to ensure that variance inflation factor did not exceed 10. To control for the possible confounding effects of gender, age, level of education and length of residence, they were entered in the first block. Ethnic identity and national identity were entered in the second block. In the first block, no significant socio-demographic predictor emerged. In the second block, the regression showed that 36% of the total variance in loneliness could be explained by the independent variables, \(F(6, 244) = 22.25, p < 0.001\) (see Table 3). Loneliness was predicted by lower level of education \((\beta = -0.11, p < 0.05)\), lower ethnic identity \((\beta = -0.11, p < 0.05)\) and higher national identity \((\beta = 0.56, p < 0.001)\). These findings support partially our second hypothesis.

To analyse the relationship between perceived discrimination and loneliness, we performed also a hierarchical multiple regression. Prior to performing the regression analysis, collinearity diagnostics were analysed to ensure that variance inflation factor did not exceed 10. To

<table>
<thead>
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<th>Loneliness</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Integration</td>
<td>-0.16*</td>
</tr>
<tr>
<td>Assimilation</td>
<td>0.42**</td>
</tr>
<tr>
<td>Separation</td>
<td>0.22**</td>
</tr>
<tr>
<td>Marginalization</td>
<td>0.48***</td>
</tr>
</tbody>
</table>

* \(p < 0.05\).
** \(p < 0.01\).
*** \(p < 0.001\).

Table 2. Correlations between intercultural strategies of Brazilian migrants and loneliness.
control for the possible confounding effects of gender, age, level of education and length of residence, they were entered in the first block. Perceived discrimination was entered in the second block. In the first block, no significant socio-demographic predictor emerged. In the second block, the regression showed that 41% of the total variance in loneliness could be explained by the independent variables, $F(5, 245) = 33.49$, $p < 0.001$ (see Table 4). Loneliness was predicted by higher perceived discrimination ($\beta = 0.62$, $p < 0.001$). These results support hypothesis 3.

Finally, to test the relationships between loneliness and self-worth and social perceptions, hierarchical multiple regression was used. Prior to performing the regression analysis, collinearity diagnostics were analysed to ensure that variance inflation factor did not

<table>
<thead>
<tr>
<th>Variables</th>
<th>Block 1, $\beta$</th>
<th>Block 2, $\beta$</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>Gender</td>
<td>0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td>Level of education</td>
<td>0.02</td>
<td>-0.11</td>
</tr>
<tr>
<td>Length of residence</td>
<td>0.10</td>
<td>-0.02</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>-0.11</td>
<td></td>
</tr>
<tr>
<td>National identity</td>
<td>0.56***</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.04</td>
<td>0.36</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.04</td>
<td>0.34</td>
</tr>
<tr>
<td>$F$-change</td>
<td>2.57*</td>
<td>60.29***</td>
</tr>
</tbody>
</table>

* $p < 0.05$.
*** $p < 0.001$.

Table 3. Hierarchical regression models of socio-demographic variables and cultural identity predicting loneliness among migrants.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Block 1, $\beta$</th>
<th>Block 2, $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.13</td>
<td>0.06</td>
</tr>
<tr>
<td>Gender</td>
<td>0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>Level of education</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Length of residence</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>0.62***</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.04</td>
<td>0.41</td>
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<tr>
<td>Adjusted $R^2$</td>
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<td>0.40</td>
</tr>
<tr>
<td>$F$-change</td>
<td>2.57*</td>
<td>152.46***</td>
</tr>
</tbody>
</table>

* $p < 0.05$.
*** $p < 0.001$.

Table 4. Hierarchical regression models of socio-demographic variables and perceived discrimination predicting loneliness among migrants.
exceed 10. To control for the possible confounding effects of gender, age, level of education and length of residence, they were entered in the first block. Self‐esteem was entered in the second block. The final block included attitudes towards Brazilians, attitudes towards Portuguese and attitudes towards other ethnocultural groups. No significant predictors emerged in the first block. In the second block, self‐esteem (\(\beta = -0.46, p < 0.001\)) emerged as a significant predictor of loneliness. Independent variables explained 22% of the total variance in loneliness. In the third block, the explained variance increased to 27%, \(F(8, 239) = 10.62, p < 0.001\). Self‐esteem (\(\beta = -0.43, p < 0.001\)) remained in this model as a significant predictor, and lower attitude towards Brazilians (\(\beta = -0.22, p < 0.001\)) and higher attitudes towards other ethnocultural groups (\(\beta = 0.14, p < 0.001\)) emerged also as significant predictors. These results support hypothesis 4, while hypothesis 5 was only partially supported (see Table 5).

### 4. Discussion

This study tested five hypotheses among Brazilian migrants living in Portugal. The data supported three hypotheses; however, two hypotheses were only partially supported. The results showed that Brazilians prefer integration, that is, the maintenance of their own cultural heritage and also the development of close ties with the host society. The first hypothesis was supported as integration was associated negatively with loneliness and positively with the other three acculturation strategies. Thus, the present results match with those reporting a positive correlation between a favourable attitude towards integration and migrants’ psychological adaptation [39]. The more opportunities to both, maintaining the heritage culture and identity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Block 1, (\beta)</th>
<th>Block 2, (\beta)</th>
<th>Block 3, (\beta)</th>
</tr>
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<tr>
<td>Age</td>
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<td>0.02</td>
<td>0.05</td>
</tr>
<tr>
<td>Gender</td>
<td>0.03</td>
<td>0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>Level of education</td>
<td>0.02</td>
<td>-0.06</td>
<td>-0.03</td>
</tr>
<tr>
<td>Length of residence</td>
<td>0.10</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Self‐esteem</td>
<td>-0.46***</td>
<td>-0.43***</td>
<td></td>
</tr>
<tr>
<td>Attitudes towards Brazilians</td>
<td></td>
<td></td>
<td>-0.22***</td>
</tr>
<tr>
<td>Attitudes towards Portuguese</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards other ethnocultural groups</td>
<td>0.14**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.04</td>
<td>0.22</td>
<td>0.27</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
<td>0.04</td>
<td>0.20</td>
<td>0.24</td>
</tr>
<tr>
<td>(F)-change</td>
<td>2.57*</td>
<td>55.39***</td>
<td>5.75*</td>
</tr>
</tbody>
</table>

\(^* p < 0.05\)
\(^{**} p < 0.01\)
\(^{***} p < 0.001\)

Table 5. Hierarchical regression models of socio-demographic variables, self-esteem and social perceptions predicting loneliness among migrants.
and seeking relationships among groups in the society of settlement, the more migrants tend to display lower loneliness.

The second hypothesis was partially supported. As expected, ethnic identity predicted negatively loneliness in agreement with past research that supports the view that a strong ethnic identity contributes positively to psychological well-being [35, 36]. However, contrary to our expectation national identity predicted positively loneliness. This finding does not support the view that positive psychological outcomes for migrants tend to be related to a strong identification with the society of settlement.

Perceived discrimination predicted loneliness in accordance with previous research [41]. The relationship between perceived discrimination and loneliness was also in agreement with past research that showed links between experiences of ethnic discrimination and poor psychological well-being [38, 40, 57]. When a migrant recognizes unequal treatment because of his/her membership in a group, he or she will tend to experience loneliness. This result supports hypothesis 3.

A strong relationship between self-esteem and loneliness was found, denoting that lonely migrants had less favourable views of themselves than non-lonely migrants, which is in consonance with previous research on adolescents [26, 44] and among adults [41]. This finding supports our fourth hypothesis. This cross-sectional study does not allow us to explore the direction of the effect between self-esteem and loneliness. However, previous research indicates that self-esteem and loneliness reciprocally affect one another [17, 44]. According to this view, both constructs exacerbate one another over time.

In this study, we have tested the negativity of social perceptions, in particular, how migrants rate members of three national groups. Findings showed that the negativity of the perceiver effect cannot be generalized to all national groups. So hypothesis 5 was only partially supported. A negative evaluation of the Brazilians was related to higher loneliness, a finding in agreement with our fifth hypothesis. However, no relationship was found between loneliness and the evaluation of members of the host society, but a positive association was found between loneliness and attitudes towards other migrant groups. How can this lack of generalizability of the negative perceiver effect be explained?

The negativity of lonely persons’ social perceptions has been consistently documented [39, 43, 58]. However, Christensen and Kashy [59] found the opposite using unacquainted persons as participants. Lonely people showed a positivity bias in perceiving others. This result suggests that lonely persons’ negativity might target close friends more than new contacts. However, [43] have observed that ‘Christensen and Kashy’s study left ambiguity to the use of participants who were previously unacquainted with each other or to the sophisticated SRM analyses’ (p. 224). Tsai and Reis [43] shed light on this aspect. They showed that ‘rather than being universally negative about others, lonely people appear to be negative primarily in their ratings of close acquaintances’ (p. 236). If it would be possible to translate those findings at the level of close acquaintances to the level of close nationalities, our findings make sense. Lonely migrants target more negatively members of their national group (Brazilians) than members of the society of settlement or of other
migrant groups. To lonely migrants, novel contacts with members of other nationalities may constitute new opportunities for meeting intimacy needs. It is worthwhile to research if the pattern of results found in the present study is also present in other migrant groups or in other cultural contexts.

In conclusion, this study followed Berry’s [1] strategies of acculturation to determine different degrees of loneliness among Brazilian migrants in Portugal and to recommend ways of counteracting the consequences of this condition. Our research displayed that lonely migrants tended to have negative views towards themselves, but in terms of perceiving others, these pessimistic views cannot be generalized to all national groups. They were more salient in relation to their own national group than towards other national groups.

This study has several limitations that should be noted. Firstly, participants were recruited through the snowball technique which limits their representativeness. Secondly, all the data were self-reported. Thirdly, the findings of this research are cross-sectional and correlational and therefore the causal relations between variables cannot be determined. Finally, given the uniqueness of the immigrant population studied we are uncertain whether current findings can be generalized to other immigrant groups and worldwide.

Despite these limitations, the current study suggests implications for interventions aimed at alleviating loneliness. The consistent relationship between loneliness and a large array of relevant health problems (e.g., depression, anxiety, suicidal ideation and substance abuse) highlights the need to develop interventions in order to alleviate loneliness. For example, findings from the current work stress the relevance of enhancing self-esteem, positive attitudes towards the Brazilians and ethnic identity. A meta-analysis on loneliness interventions showed that social skills training was less effective comparatively with interventions addressing maladaptive social cognitions [14]. Thus, our results are in agreement with ([44], p. 1078) suggesting that ‘clinical work could significantly benefit from extending current social skills trainings with interventions aimed at improving social cognitions and self-perceptions’.

As psychologists, we have emphasized individuals and individual differences. Experts using other approaches might reach different explanations. For example, anthropologists might have found a larger role for culture; sociologists, a larger role for power relations and established institutions; and political scientists, a higher relevance for national policies. We argue that using the psychological strategies of acculturation, as developed by Berry [1], provided this study with some important findings which could be integrated into the education of health-care professionals to combat loneliness among migrants.

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References


