

Article

# Acculturation and adaptation of international students at Portuguese universities

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**Abstract:** The importance of understanding the adaptation of international students is particularly relevant to the expansion of the internationalization of higher education. This paper examines various psychosocial features with regard to the intercultural relations of international students (IS) in Portugal. This country is receiving an increasing number of IS. Two key components of intercultural relations are acculturation and adaptation. As regards the acculturation process, we examine studies on cultural identity, acculturation strategies, and perceived discrimination. As regards psychological adaptation, we examine studies on several indicators of subjective well-being (overall well-being, satisfaction with life, satisfaction with academic life, satisfaction with migration life), and loneliness. Finally, it is reviewed research on sociocultural adaptation. This set of reviewed studies on international students is consonant with the perspective that most migrant people adapt well in the society of settlement, notwithstanding the difficulties found across the intercultural contact. A relevant contribution to the acculturation field was the demonstration that sociocultural adaptation difficulty fully mediated the relationships of perceived discrimination and two indicators of psychological adaptation, satisfaction with life and loneliness. This underlying relationship of perceived discrimination with psychological adaptation means that programs to decrease sociocultural adaptation difficulties among international students may help to improve their psychological adaptation. Several other practical recommendations can be drawn from this set of studies.

**Keywords:** acculturation; adaptation; international students; Portugal

## 1. Introduction

Sojourners are “people who travel internationally to achieve a particular goal or objective with the expectation that they will return to their country of origin after the purpose of their travel has been achieved” (Safdar and Berno, 2016, p. 173). IS is a significant sojourner group. There has been an increase in the number of IS in western universities over the last decades. The number of IS enrollees in organizations of higher education enhanced all over the world from two million in 1999 to five million in 2016 (OECD, 2018).

This paper scrutinizes various psychosocial aspects of the intercultural relations of international students from Lusophone countries at Portuguese universities. Overall, these aspects provide guidelines to academics and practitioners to understand and help international students. The enhancement of the well-being of the international students is also beneficial for higher education organizations that receive them. International students refine higher education organizations with their cultural diversity, and they expand international possibilities. Two key aspects of intercultural

relations are acculturation and adaptation (Ahn and Lee, 2023; Sam and Berry, 2016; Schmitz and Schmitz, 2022).

## 2. International students at Portuguese universities

Portugal is receiving an increasing number of IS. From 2009/10 to 2020/21, the number of IS coming to Portugal nearly tripled (Oliveira, 2022). In 2009/10 the proportion of IS enrolled in higher education was 5%. In 2020/21 there were 56,323 IS attending higher education, constituting 14.3% of higher education student enrollment. According to data from the Organization for Economic Cooperation and Development (2024), in 2022 the proportion of IS enrolled in higher education in Portugal was like Germany and the Slovak Republic (12%) and higher than in France (9%), the United States (5%), and Spain (4%).

More than half of the IS were from Lusophone nations (61.6%), and a quarter (25%) were from the European Union. There was a prevalence of female IS (53.3%). Historically, IS from Angola and Cape Verde have represented the two major groups; though, IS from Brazil have become the major group since 2008/2009. In 2020/21 the most IS were from Brazil (33.8%), followed by Cape Verde (8.3%), Angola (7.2%), Guinea-Bissau (7.1%), France (5.8%), Spain (4.9%), Italy (4.9%), and Germany (3.5%).

Several factors motivate students from PALP [*Países Africanos de Língua Portuguesa* (African countries where Portuguese is the official language)] and Brazil to leave their home countries to attend Portuguese higher education organizations: same language, family and acquaintances in the sojourn society, international agreements, quality of life, teaching standards, and eventually more job opportunities (Iorio, 2021; Mourato, 2011; Wilks and Neto, 2016). Another relevant motivation to choose Portugal concerns the low level of urban violence. Portugal is one of the safest countries in the world, and some Brazilian students moved to Portugal to live in a more peaceful country (Reis et al., 2021). Plans for the future differed, but the majority of PALP and Brazilian IS intended to return home (António, 2013; Iorio, 2021; Wilks and Neto, 2016).

Research has used theoretical frameworks of acculturation and adaptation to scrutinize international students at Portuguese universities (Neto, 2020, 2021, 2023, 2024; Neto and Wilks, 2017; Wilks and Neto, 2016). The data of these studies have been collected between 2015 and 2022. **Table 1** presents sociodemographic characteristics and key findings of these studies. Three studies were conducted among Cape Verdean IS, two studies examined Angolan IS, and two studies approached Brazilian IS. One study used qualitative methodology, and five studies used quantitative methodologies. The samples of the studies were not selected randomly. Subsequently, this set of studies will be reviewed after a brief presentation of theoretically relevant issues about acculturation and adaptation.

**Table 1.** A summary of the studies.

	Average age	Gender	Nationality of international students	Size of the samples of international students	Methodology design	Key findings
Wilks and Neto (2016)	26 years	58% women	Cape Verdean	12	Qualitative methodology	Participants reported high levels of adaptation stress. They felt integrated after an initial period. They maintained their ethnic identity.
Neto and Wilks (2017)	26 years	59% women	Cape Verdean	243	Quantitative methodology	Cape Verdean international students reported lower well-being and higher loneliness than native-born Portuguese students. Higher loneliness was related to lower ethnic identity and sociocultural adaptation and higher perceived discrimination. Higher well-being was related to lower national orientation and higher ethnic orientation, satisfaction with academic life, and sociocultural adaptation.
Neto (2020)	27 years	56% women	Angolan	204	Quantitative methodology	Angolan international students revealed lower well-being and higher academic satisfaction than Portuguese students. Acculturation and sociocultural adaptation factors accounted for a larger proportion of explained variance in subjective well-being than demographic factors.
Neto (2021)	26 years	55% women	Angolan and Cape Verdean	398	Quantitative methodology	International students reported higher levels of loneliness than native-born students. The most significant predictors of loneliness for international students were financial situation, perceived discrimination, and orientation to heritage culture.
Neto (2023)	26 years	63% women	Brazilian	189	Quantitative methodology	International students are generally satisfied with their migration life. Higher satisfaction with migration life was significantly related to lower financial problems, perceived discrimination, sociocultural adaptation problems, and higher cultural intelligence and satisfaction with life.
Neto (2024)	25 years	62% women	Brazilian	174	Quantitative methodology	The integration and the contact hypothesis were supported. Higher psychological adaptation was related to higher academic achievement and social support. Sociocultural adaptation difficulty fully mediated the relationship of perceived discrimination and both indicators of psychological adaptation, satisfaction with life and loneliness.

### 3. Acculturation and adaptation

The study of acculturation and its outcome, adaptation, has produced an extensive corpus of literature (Demes and Geeraert, 2014; Sam and Berry, 2016; Ward et al., 2001). Acculturation concerns cultural and psychological changes resulting from intercultural contacts (Berry, 2017). It is a multifaceted process.

Ward and Kennedy (1999) proposed to differentiate psychological adaptation from sociocultural adaptation. The former concerns “how comfortable and happy a person feels with respect to being in the new culture or feeling anxious and out of place” (Demes and Geeraert, 2014, p. 91). Psychological adaptation in some instances is termed “feeling well”. Psychological adaptation is evaluated by well-being or psychological distress measures. Sociocultural adaptation concerns “intercultural competence with emphasis on behavioral domains” (Ward and Kennedy, 1999, p.

662). In some instances, it is termed “doing well”. It is evaluated by “the amount of difficulties experienced in the management of everyday social situations in the host culture” (Ward and Kennedy, 1996, p. 291).

### **3.1. Acculturation process of international students**

Various literature reviews have recognized significant intercultural components of the acculturation process (e.g., Benet-Martínez et al., 2021; Sam and Ward, 2021; Schmitz and Schmitz, 2020; Valenzuela et al., 2021). Three of these key intercultural components among IS at Portuguese universities are examined in this paper: cultural identity, acculturation strategies, and perceived discrimination (PD).

#### **3.1.1. Cultural identity**

Cultural identity comprises both ethnic and national identity (Phinney, 2003), and it is possible to identify with both groups. There is work showing that strong ethnic and national identities may be resources for psychological adaptation (Berry et al., 2006).

Cape Verdean IS reported stronger preference for the Cape Verdean identity ( $M = 3.74$ ,  $SD = 0.78$ ) than for the Portuguese identity ( $M = 3.20$ ,  $SD = 0.92$ ) (Neto and Wilks, 2017). However, both identities were positive, above the midpoint of the scales. The relationship between ethnic and national identities was significantly negative ( $r = -0.34$ ,  $p < 0.001$ ). This negative correlation suggests that one can identify more with the Cape Verdean culture than with the national host culture. Angolan IS reported similar preference for the Angolan identity ( $M = 3.20$ ,  $SD = 0.96$ ) and for the identification with the larger society ( $M = 3.20$ ,  $SD = 0.96$ ) (Neto, 2020). Then, they presented a positive identification with the home group and the host group.

#### **3.1.2. Acculturation strategies**

Acculturation strategies concern how individuals seek to live following intercultural contact (Abu-Rayya et al., 2023; Berry, 1980). For Berry (1997), acculturation is a bi-dimensional process in which two orthogonal acculturation preferences, (1) “cultural maintenance”, and (2) “host country participation” are combined. The use of these options gives four possible acculturation strategies: (a) integration (high orientation to both cultural maintenance and host country participation); (b) assimilation (high orientation to the host country participation and low orientation to cultural maintenance); (c) separation (high orientation to cultural maintenance and low interest in host country participation); and (d) marginalization (low interest in both cultural maintenance and host country participation).

Using an in-depth qualitative methodology, Wilks and Neto (2016) showed that Cape Verdean IS in a Portuguese university, although not perceiving themselves to be fully integrated, do not feel marginalized either, showing a preference for the company of their own ethnic group while accommodating themselves to the broader demands of the institutional and social context. They had great expectations before leaving their home country. However, “In general, they expressed a feeling of having been misled by the Cape Verdean officials and were disappointed with the lack of support upon their arrival. For instance, they expected help in finding accommodation and some guidance but did not receive any assistance. The mismatch in expectations caused much distress and disorientation” (Wilks and Neto, 2016, p. 70).

Neto (2024) studied the acculturation strategies among Brazilian IS in Portugal. In this sample, integration scores were significantly higher than those of assimilation, separation, and marginality. Hence, the most favored way of living in intercultural contact situations for Brazilian IS was the integration strategy.

In sum, both samples, including IS (Brazilians and Cape Verdeans), preferred the integration strategy. This finding is in consonance with other national (Berry, 2017) and international studies (Grigoryev et al., 2021; Unuglia et al., 2020). According to Berry and Hou (2017), “the reason for this pattern of findings may be that individuals and groups come to realize that this is the most psychologically satisfying way of living in culturally plural societies” (p. 37). Indeed, the double engagement with both cultures provides “more behavioral flexibility” when adapting to the new society of settlement (Grogoryev et al., 2023). In this instance, migrants receive support and resources from the home culture and from the host culture and display competence in dealing with both cultures.

### **3.1.3. Perceived discrimination**

Perceived discrimination represents a core feature of the acculturation process (Berry, 2017). It is a subjective interpretation of being unfairly considered resulting from prejudice and ethnocentrism. Meta-analytic reviews showed that greater perceived discrimination was related to poorer subjective well-being and mental health (Benner et al., 2018; Schmitt et al., 2014). Several studies have examined the levels and the correlates of perceived discrimination among IS at Portuguese universities (Neto, 2021, 2023; Neto and Wilks, 2017; Wilks and Neto, 2016).

The mean perceived discrimination score among African IS ( $M = 3.37$ ;  $SD = 0.85$ ) was greater than the neutral midpoint of the scale (3) (Neto, 2021). Hence, the perceived victimization from discriminatory events revealed a somewhat high occurrence among African IS in Portugal. In contrast, the mean perceived discrimination score for Brazilian IS ( $M = 2.55$ ;  $SD = 0.96$ ) was lower than the neutral midpoint of the scale (3) (Neto, 2023). Hence, the perceived victimization from discriminatory events presented a somewhat low occurrence among Brazilian IS in Portugal. These findings also suggested that the perception of discrimination was higher for African IS than for Brazilian IS.

In a qualitative research, Cape Verdean women perceived more discrimination than Cape Verdean men (Wilks and Neto, 2016). Several female interviewees “said that their host peers avoided sitting next to them and remarked on their offensive comments... One of them described a racist experience in a bus when a Portuguese woman told her that Negroes had come to take all the bus seats” (Wilks and Neto, 2016, p. 71).

Below we will present the relationships between perceived discrimination and adaptation.

## **3.2. Psychological adaptation**

Now we are going to examine the psychological adaptation of IS at Portuguese universities, considering their overall subjective well-being (SWB), satisfaction with life, satisfaction with migration life, satisfaction with academic life, and loneliness.

### **3.2.1. Overall subjective well-being**

Subjective well-being (SWB) concerns how individuals think and feel about themselves (Diener et al., 2018). SWB represents a key acculturation outcome (Schmitz and Schmitz, 2010). Domain satisfaction is a relatively understudied issue of the SWB (Bardo and Yamashita, 2014), but previous work has demonstrated that life satisfaction domains were related to well-being (Caycho-Rodriguez et al., 2020; Ruiz et al., 2009).

Neto and Wilks (2017) explored the levels and predictors of SWB in Cape Verdean international students. In this study, overall SWB was measured by aggregating the averages of satisfaction with life and affect balance. Cape Verdean international students presented lower well-being than the native-born students. The results showed that ethnic orientation and national orientation significantly predicted well-being. Specifically, the higher the relevance of maintaining the home culture and the lower the relevance of holding the host culture, the higher the level of well-being. These findings are in sharp contrast with those of Demes and Geeraert (2014), who found that “the greater the importance placed on maintaining the home culture, the poorer the sociocultural and psychological adaptation. Conversely, the more importance placed on embracing the host culture, the better adaptation” (p.102). Nonetheless, the findings are in line with other research that points out the positive aspects of preserving the home culture (Berry, 2017; Ward and Kennedy, 1994). Indeed, these findings showed that IS who strongly endorsed the home culture and downplayed the relevance of the host culture presented greater levels of well-being. One possible explanation for these results is that most of the IS in this sample might be experiencing the separation strategy. This psychological attempt to return to the home culture and lifestyle gives them comfort and security. More research is needed to clarify this aspect.

Another work scrutinized the overall SWB of Angolan IS attending Portuguese universities (Neto, 2020). In this study, overall SWB was also measured by aggregating the averages of SWL and affect balance. Angolans IS presented lower well-being than Portuguese students. Angolan IS who indicated higher SWB also presented greater proficiency in the language of the society of sojourn, in-group interactions, ethnic identity, and sociocultural adaptation. In this study, demographic measures did not significantly predict overall well-being.

### **3.2.2. Satisfaction with life**

Satisfaction with life represents a cognitive assessment of one’s SWB (Diener et al., 1985) in which “individuals assess the quality of their lives on the basis of their own unique set of criteria” (Pavot and Diener, 1993, p. 164). Prior investigation showed that SWL was positively related to health, meaningful social relations, and productivity, among others (Diener, 2013).

A study by Wilks and Neto (2016) explored in depth the experience of Cape Verdean IS. They reported that despite the difficulties, they felt satisfied with themselves and their lives and viewed studying in the host country as an opportunity for acquiring new competencies and for personal growth.

In a study conducted among Brazilian IS (Neto, 2024) was found that higher SWL was significantly and positively associated with higher preference for integration.

Furthermore, the results of this study revealed that higher SWL was significantly and positively associated with higher academic achievement and social support. These results indicated a beneficial relation between the preference for the integration strategy, academic achievement, and social support to international students' psychological adaptation. Satisfaction with life predicted significantly and negatively lower financial status and higher duration of sojourn (Neto, 2024).

### **3.2.3. Satisfaction with migration life**

Satisfaction with migration life is “a global cognitive evaluation by the migrant of his or her migrant life in which the criteria for the judgment are up to the individual” (Neto and Fonseca, 2016, p. 47). Satisfaction with migration life constitutes another construct that can be used in the domain of psychological adaptation, in addition to usually considered indicators such as self-esteem, SWL, and psychological problems (Berry et al., 2006). Satisfaction with migration life is relevant to higher education institutions for retaining IS and assuring positive word-of-mouth recommendations to other potential students.

A study was conducted with Brazilian IS in Portugal to advance the knowledge on satisfaction with migration life (Neto, 2023). Overall, the findings showed that the Satisfaction with Migration Life Scale (SWMLS; Neto and Fonseca, 2016) was a valid and reliable tool among international students. Globally, IS revealed satisfaction with their migration life. The average score of the SWMLS obtained was 4.48, significantly greater than the scale midpoint of 4.00. This finding is in line with Furnham's (2004) observations: “It is certainly worth noting that for many students the ‘overseas’ experience is enormously beneficial and can shape their outlook for the rest of their lives” (p. 18).

Satisfaction with migration life scores was significantly related to several measures (Neto, 2023). Among the demographic factors considered, only financial status predicted significant migration life satisfaction. IS with poorer financial situations reported lower migration satisfaction.

The higher discrimination IS perceived, the less they experienced migration satisfaction. This is consistent with previous investigation reporting that perceived discrimination was related to diminished psychological well-being (Berry, 2017; Tartakovsky et al., 2021). Sociocultural adaptation problems significantly and negatively predicted migration satisfaction. This finding pointed out that when IS had higher difficulty in managing their daily life in the society of sojourn, they felt lower migration satisfaction. Furthermore, in this study (Neto, 2023), life satisfaction significantly and positively predicted migration life satisfaction. This is consistent with prior research that showed substantial relations between satisfaction with overall life and its diverse domains (Bardo and Yamashita, 2014; Ruiz et al., 2009).

Thomas et al. (2008) defined cultural intelligence as “a system of interacting knowledge linked by cultural metacognition that allows people to adapt to, select, and shape the cultural aspects of their environment” (p. 126). Possessing these abilities, culturally intelligent international students may be more likely to be satisfied with their life or with migration due to their ability to fit into their cross-cultural settings. Indeed, in this study it was found that, as expected, higher cultural intelligence significantly predicted greater migration satisfaction (Neto, 2023).

In sum, this work indicated that migration life satisfaction played a role in theoretical and applied research on the outcomes of acculturation as an indicator of psychological adaptation.

#### **3.2.4. Satisfaction with academic life**

Satisfaction with academic life is a relevant construct for the education domain (Alnajjar and Alacapınar, 2024; Lent et al., 2007), and it also represents a specific domain satisfaction. In a qualitative study, Cape Verdean IS were confident in their academic abilities, “despite dissimilarities in educational systems, teaching styles, and the curriculum” (Wilks and Neto, 2016, p. 73).

Neto (2020) considered the levels and the factors related to satisfaction with the academic life of Angolan IS attending Portuguese universities. Angolans IS presented greater academic satisfaction than Portuguese students. The results of this study with Angolan IS pointed to a mixed pattern of the “immigrant paradox”. The “immigrant paradox” consists of the counterintuitive finding that immigrants tend to show better adaptation outcomes than their national peers despite poorer socioeconomic status (Berry et al., 2006). This phenomenon has been mainly studied in the United States and Canada (García-Coll and Marks, 2012). However, Sam et al. (2008) studied the psychological and sociocultural adaptation among immigrant youth living in five European countries (Norway, Netherlands, Finland, Portugal, and Sweden). In consonance with this phenomenon, the results indicated that immigrant youth revealed more school satisfaction and achievement than their native peers. If the result regarding academic life satisfaction, a specific life domain, supported the “immigrant paradox”, the findings concerning overall well-being, reported earlier, did not support the “immigrant paradox. This calls our attention to the observation that “the healthy immigrant effect depends on the health indicators used and the society of settlement” (Neto, 2020, p. 467).

A study with Cape Verdean participants studying in Portuguese universities (Neto and Wilks, 2017) also showed that among a set of predictors of SWB, academic satisfaction was the strongest predictor of well-being. Higher academic life satisfaction was associated with higher SWB. “This is understandable, given that international students’ well-being is closely related to the way they can accommodate themselves in a new educational setting” (Neto and Wilks, 2017, p. 1097).

#### **3.2.5. Loneliness**

Within psychological adaptation, one component is loneliness (Neto et al., 2017). Most definitions of this construct highlight perceived deficits in social relations. For instance, for Asher and Paquette (2003, p. 75), loneliness is “the cognitive awareness of a deficiency in one’s social and personal relationships and ensuing affective reactions of sadness, emptiness or longing”. It is linked to a range of health and psychological problems across life spans and cultures (Lim et al., 2020; Rokach and Neto, 2005).

Neto and Wilks (2017) explored the levels and predictors of loneliness among Cape Verdean IS enrolled in Portuguese universities. These scholars showed that the Cape Verdeans displayed higher loneliness than the national students. Ethnic identity and perceived discrimination significantly predicted loneliness among Cape Verdean IS. In particular, weaker ethnic identity and higher perceived discrimination were

related to higher loneliness. Hence, these findings supported a negative relation between loneliness and ethnic identity. Results pointed out that ethnic identity protected IS from loneliness. As ethnic identity provides a sense of belonging and inclusion, it seemed to play a role in countering loneliness. This confirmed prior qualitative research indicating that, while preserving the Cape Verdean ethnic identity, students felt well adapted to the society of settlement. Perceiving discrimination by members of the society of settlement was linked to loneliness among Cape Verdean IS. This confirmed prior results with other migrant groups regarding mental health (Benner et al., 2018; Schmitt et al., 2014).

Neto (2021) examined the correlates of loneliness from African IS (from Angola and Cape Verde). Results of this study showed that these African IS displayed higher loneliness than national students. Among the background variables (gender, age, financial status, and length of stay), only financial status was significantly related to loneliness. A poorer financial situation significantly predicted higher loneliness. This finding is consistent with prior work pointing out that weaker health was associated with financial difficulties (Richardson et al., 2017). Among the acculturation variables, higher PD and lower orientation to heritage culture significantly predicted higher loneliness. In fact, PD is a major acculturative stressor related to lonely feelings (Neto et al., 2017). These results are consistent with work indicating that PD is associated with poor psychological well-being (Zhang and Goodson, 2011). Furthermore, higher orientation toward the home country was associated with lower loneliness. This result did not agree with prior research showing that this orientation is related to experiencing adverse feelings along acculturation (Demes and Geeraert, 2014). Our results indicated the benefits of maintaining orientation to heritage culture (Brisset et al., 2010).

In another study among Brazilian IS (Neto, 2024) was found that lower loneliness was significantly connected with higher preference for integration. Furthermore, lower loneliness was significantly related to higher academic achievement and social support. These results indicated a beneficial relation between the preference for the integration strategy, academic achievement and social support, and international students' psychological adaptation. No socio-demographic factor (age, gender, financial status, or length of sojourn) was significantly connected with loneliness.

### **3.3. Sociocultural adaptation**

Sociocultural adaptation is based in the culture-learning framework within acculturation psychology and concerns one's "ability to fit in, to acquire culturally appropriate skills, and to negotiate interactive aspects of the host environment" (Ward and Kennedy, 1999, p. 660). It concerns the cultural competencies acquired by IS during cross-cultural transition. A meta-analytic study showed that personal and situational factors were related to sociocultural adaptation (Wilson et al., 2013). There is research demonstrating that psychological and sociocultural adaptations are interrelated (Tatarko et al., 2020; Ward et al., 2011). For instance, Ward and Kennedy (1999) showed a positive relationship between both kinds of adaptations.

Several studies with IS also showed that sociocultural adaptation and psychological adaptation were interrelated. Among Cape Verdean IS sociocultural

adaptation was associated with three indicators of psychological adaptation. Higher sociocultural adaptation was related to greater overall well-being, higher satisfaction with academic life, and lower loneliness (Neto and Wilks, 2017). Among Angolan IS sociocultural adaptation was significantly related to two indicators of psychological adaptation. Higher sociocultural adaptation was related to greater overall well-being and higher satisfaction with academic life (Neto, 2020). Among Brazilian IS sociocultural adaptation was significantly related, besides satisfaction with migration life, to other indicators of psychological adaptation (SWL, positive affect, and negative affect). Higher sociocultural adaptation was related to greater SWL and positive affect and lower negative affect (Neto, 2023).

Furthermore, sociocultural adaptation was linked to several indicators of the acculturation process. For example, among Cape Verdean IS higher sociocultural adaptation was related to higher ethnic identity, higher home orientation, higher host orientation, and lower perceived discrimination (Neto and Wilks, 2017). Among Angolan IS better sociocultural adaptation was related to higher language proficiency, which increases cultural learning opportunities and higher ethnic identity (Neto, 2020). Among Brazilian IS sociocultural adaptation was also related to perceived discrimination (Neto, 2023). The more discrimination international students perceived, the poorer their sociocultural adaptation. The result is consistent with prior investigation. For example, among all the variables examined in a meta-analytic study (Wilson et al., 2013), perceived discrimination exhibited the strongest association with sociocultural adaptation.

A gap in the acculturation field is that studies have mainly studied direct effects of diverse measures on adaptation and disregarded indirect effects that underlie the relationship between predictors. Few studies have scrutinized sociocultural adaptation difficulties mediating the relationships of other factors with psychological adaptation. Recently Neto (2024) examined whether sociocultural adaptation would mediate the impact of perceived discrimination on two indicators of psychological adaptation (SWL and loneliness). As hypothesized, sociocultural adaptation did mediate the association of PD and both indicators of psychological adaptation. International students who perceived more discrimination dealt with social difficulty in the host country less competently and, in turn, tended to experience less satisfaction with life and more loneliness. These findings represent a novelty within the acculturation field. This underlying relationship of perceived discrimination with psychological adaptation means that programs to decrease sociocultural adaptation difficulties among international students may help to improve their psychological adaptation.

#### **4. Discussion and conclusion**

This paper reviewed various psychosocial aspects of the intercultural relations of IS from Lusophone countries at Portuguese universities. Several limitations of this review of studies should be noted. Firstly, considering the limited size of the samples, the results of this review should be interpreted with caution. Secondly, the participants of the studies were not selected randomly; therefore, the generalizability of the findings is limited. Future research using random sampling is needed to address this gap. Thirdly, the samples included IS whose official language in the home culture was

the same as the host culture. The findings should be viewed with regard to the specific cultural context in which the research was performed. Future investigations with broader linguistic groups are needed to explore whether IS adapt successfully in the country of sojourn as well as their native-born colleagues. Finally, the cross-sectional design of the studies prevents the inferences of directionality and causality of variables. Hence, future research using longitudinal or experimental designs is welcome. Despite these limitations, some practical recommendations can be drawn from this set of studies.

Past investigations that compared adaptation of immigrant samples with non-immigrant samples are mixed (Berry and Hou, 2016; Kilinc and Granello, 2003; Sam et al., 2008). The research reviewed has also shown a mixed portrait, but a predominant portrait suggested lower psychological adaptation for IS than for native-born students. On one hand, Angolan international students displayed greater academic satisfaction than the Portuguese students (Neto, 2020). This academic life satisfaction gap can be explained by the theory of immigrant optimism and the drive for success in the home country (Kao and Tienda, 1995). As a result of this drive, IS are likely more able to benefit from educational opportunities than their native colleagues of the sojourn country. Considering the lack of qualified staff in Angola, the attainment of a higher education degree represents an asset to the Angolan country (António, 2013).

On the other hand, Cape Verdean (Neto and Wilks, 2017) and Angolan (Neto, 2020) IS displayed lower well-being than the native-born students. African IS presented higher loneliness than national students (Neto, 2020; Neto and Wilks, 2017). Current findings suggest that African international students may need further help services, given that they tended to feel lonelier and have lower well-being than national students. Some African IS were at greater risk for establishing psychosocial maladjustment than others. Interventions targeting loneliness (Cacioppo et al., 2015) can increase the well-being of IS. Counseling may help IS cope with these psychological difficulties. As Lillyman and Bennet (2014) indicate, by planning and supporting, universities of the sojourn country can provide a positive experience for IS.

Findings suggested that greater levels of perceived discrimination predicted lower well-being and greater loneliness among PALP and Brazilian IS. However, the perception of occurrences as unfair was higher for African IS than for Brazilian IS. In order to reduce perceived discrimination, higher education institutions should make clear the prohibition of discriminatory events in academic contexts. The role of educational institutions to assist IS is pivotal. The findings draw attention to the importance of intervention programs particularly devised to support African IS for reducing PD or for learning the ways to deal with it. For example, to decrease PD, peer-to-peer programs in which IS were paired with native colleagues might be developed. In particular, Imai and Imai (2019) showed that the self-disclosure of IS did reduce the harmful effect of the perceived discrimination on loneliness.

The research reviewed has evidenced that demographic variables explained a poor amount of variance in SWB and loneliness. This is in line with a review literature of one hundred and forty-one empirical studies about SWL, showing that the relation between demographic variables and SWL was weak, and these factors contributed modestly to predict satisfaction with life (Proctor et al., 2009). In the results presented

only financial status was significantly related to satisfaction with life and loneliness. Greater financial difficulties issues predicted lower subjective well-being and higher loneliness. These findings are consistent with prior studies indicating that greater emotional distress was associated with financial hardships (Richardson et al., 2017). “Higher education institutions may help IS in solving some of these financial problems. For example, they can create job opportunities for students within the university context. Work provides a sense of usefulness and purpose for IS” (Neto, 2021, p. 409).

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## Abbreviations

IS	International Students
M	Mean
OECD	Organisation for Economic Co-operation and Development
PALP	Países Africanos de Língua Portuguesa (African countries where Portuguese is the official language)
PD	Perceived discrimination
SD	Standard Deviation
SWB	Subjective Well-Being
SWL	Satisfaction With Life
SWLS	Satisfaction With Life Scale
SWMLS	Satisfaction with Migration Life Scale

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