Mediating Role of Social Exclusion in the Relationship Between Sense of Belonging and Loneliness in International Students

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Abstract

This research aims to examine the mediating role of social exclusion in the relationship between a sense of belonging and loneliness in international students. The research sample is composed of international students studying in universities in Türkiye. In the research, in which 284 students voluntarily participated, General Belongingness Scale, UCLA Loneliness Scale, and Social Exclusion Scale were applied. The study was designed by establishing Hayes Process Model 4 as the regression model. Sense of belonging was found to be in negative relation with social exclusion and loneliness. Moreover, a positive relationship was observed between social exclusion and loneliness. Finally, it was noticed that social exclusion acts as a mediator of the process towards belonging and loneliness and has a significant impact on loneliness. These findings were discussed within the literature framework mentioned in the conclusion part, and suggestions were made.

Keywords: International Students, Loneliness, Sense of Belonging, Social Exclusion

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Introduction

Nowadays, students' eagerness to study in developing countries and the spread of student exchange programs have rapidly increased international students worldwide (OECD, 2016). The concept of international student refers to crossing a national border to study for a certain period (Richters & Teichler, 2006; UNESCO, 2009). Students getting together from many different countries face psychological, cultural, and sociological problems in starting a new life in the countries they will study and during the adoption process to different atmospheres (Cerna, 2014; Mehra, & Bishop, 2007; Wu, Garza, & Guzman, 2015). It is seen that the studies related to international students have addressed their perceptions, exploratory learning processes, feelings of loss and loneliness, cultural shock, cultural value, leadership expectations, benefiting from psychotherapy, longing for home, integration, change of identity, use of smartphones, going back to home as well as educational processes such as academic success, language learning, educational experiences, motivation levels, benefiting from the library, and learning strategies (Anandavalli, 2021; Annamalai et al., 2021; Cho et al., 2021; Bani Ahmad, & Meriç, 2021; Kayser-Jones & Abu-Saad, 1982; Li et al., 2007; Matic & Russell, 2020; Matsunaga et al., 2021; Raja et al., 2021; Sawir et al., 2008; Stokes et al., 2021; Wawera & McCamley, 2020; Wu et al., 2021; Zhong & Cheng, 2021). Studies have focused more on the individual and the individual's interest in the unique environment. Any negative influence of the other party and consequential emotional state has not been addressed much.

While the number of international students is increasing rapidly in the world, Türkiye has become a popular place of education because of its location between Asia and Europe, its cultural richness, and the increasing quality of education as well as affordable costs of living and education (Özoğlu et al., 2015). Moreover, the number of international students has increased as a result of the introduction of scholarship programs in Türkiye for international students (Türkiye scholarships, Türkiye-Africa scholarship program), scholarships provided by Türkiye Diyanet Foundation, Islamic Development Bank, Non-Governmental Organizations (NGO), and by universities themselves, and also as a result of the spread of Erasmus and Mevlana exchange programs. After examining the change in the number of international students in Türkiye by years, it was reported that there were 15481 international students in 2005-2006, 31170 in 2011-2015, and 154446 in 2019 (Council of Higher Education of Türkiye [YÖK], 2019).

When considered in the context of Türkiye, it is known that besides facing the same academical problems with that as Turkish students, international students also experience problems in social and cultural adaptation, financial problems, and challenging stress factors such as adaption to a new education system, and learning a language (Şahin & Demirtaş, 2014). Living and learning conditions and services provided by the universities to international students facilitate the adaptation of international students and play a critical role in their sense of belonging (Morrow & Ackermann,

2012; Neel & Fuligni, 2013). When international students cannot feel this sense of belonging, their university attendance and numbers decrease. The emergence of different problems, such as loneliness and social exclusion, are among the factors affecting belonging (Barg, 2013). This study addresses the mediating role of social exclusion on international students' general belonging and loneliness. It is considered that examining the effect of social exclusion on loneliness would contribute to a study different from those on their personal or educational status.

Literature Review

Generally, a sense of belonging is defined as an innate ambition or motivation to be in relation with the people, places, or communities (Anderman, 2002; Baumeister & Leary, 1995; Booker, 2007; Osterman, 2000). Individuals should meet their need for belonging, lying below their need for higher success (Maslow, 1943). Considering these processes, belonging affects motivation (Oğuz Duran & Kusci, 2021). A sense of belonging is also of critical importance for university students. Researches have revealed that the sense of belonging has a significant relationship with academic success, high self-esteem, low levels of loneliness, social acceptance, and school satisfaction among university students (Allen & Kern, 2017; Baumeister & Leary, 1995; Booker, 2007; Faircloth & Hamm, 2005; Neel & Fuligni, 2013; Osterman, 2000). In terms of belonging, especially school belonging, factors such as being accepted by friends, in the class environment, and inclusion into the group lead to the feeling of self-importance (Goodenow, 1993). It is stated that students who do not have a sense of belonging experience problems in dealing with academic difficulties due to their low motivation and self-efficacy (Erichsen & Bollinger, 2011). Lack of or low sense of belonging may lead to loneliness, despair, stress, depression, and suicide (Hill, 2006; Levett-Jones et al., 2007; Yue & Le, 2013).

Although there are many definitions in the literature, there is no clear definition of loneliness accompanying the lack of a sense of belonging. When the definitions related to loneliness are examined, it is seen that there are different definitions as the lack of a close relationship with other people or not feeling as such (Rogers, 2014), the mood emerging concerning the feeling of deprivation resulting from the low number of relations required by the individual or lack of sincerity in these relations, or lack of contentment in interpersonal relations (Young, 1982), unpleasant feeling caused by the dissatisfaction of the need for getting into close relation (Sullivan, 1953). As opposed to the widespread view, loneliness is more common during adolescence and young adulthood than in old age (Brennan, 1982). University years, when many people leave their families for the first time and join a new environment, coincide with adolescence and young adulthood. Thus they are stated to be the years that individuals feel loneliness more (Brennan, 1982). Especially considering that international students are generally young adults, it is seen that those facing the feeling of loneliness at most are international students (Yeh & Inose, 2003). Additionally, starting at a university may lead to feelings of loneliness in the individual. Factors such as an individual is not feeling oneself essential, the impact

of a new culture, and different age groups may affect the process (Rokach & Spirling, 2016). Loneliness and belonging have social and psychological functions in the life of an individual (Hagerty & Williams, 1999; Hagerty, et al., 1996). Researches have revealed that the sense of belonging and loneliness are related in both social and health fields (Hagerty et al., 1996; Tomaka et al., 2006). Researches addressing the belonging and loneliness variables together reported a significant relationship between these two variables (Cicognani et al., 2014; Hagerty & Williams, 1999; Mellor et al., 2008; Satan, 2020).

Besides loneliness, social exclusion is another variable that may affect the sense of belonging of international students. State emerging as a result of the lack of sense of belonging which is one of the fundamental needs of an individual, is considered social exclusion (Baumeister & Leary, 1995). Social exclusion points to the overall experiences that cause a person to feel emotionally or physically different from others (Riva et al., 2016; Wesselmann & Williams, 2017). In the literature, it has been reported that individuals lose their sense of belonging due to social exclusion and experience loneliness and hopelessness intensely (Baumeister & Leary, 1995; Bossi et al., 2018; Ren et al., 2017). Studies have revealed that individuals facing social exclusion are more inclined to loneliness as a coping method, and there is a significant relationship between loneliness and exclusion (Bangee et al., 2014; Ren et al., 2017; Williams, 2001; 2009).

University students are expected to have a sense of belonging after a certain adaptation period, but this is somewhat different for international students (Yoon et al., 2012). It is emphasized that in this critical period, especially international students experience more loneliness due to some fields of trouble, such as academic problems and language learning difficulties (Lee, 2017; Leong, 2015; Ren & Hagedorn, 2012; Tananuraksakul & Hall, 2011), socio-cultural problems (Mori, 2000; Pedersen, 1991; Tchoh & Mertan, 2018), discrimination (Lee & Rice, 2007; Lee, 2017) and economic problems (Lee, 2017; Sherry et al., 2010). It is stated in the literature that this is related to negative personality traits such as the individual's lack of social skills (Deniz et al., 2005; Jones et al., 1982), shyness (Dill & Anderson, 1999), social anxieties (Ryan & Patterson, 1987), insecure attachment (Bogaerts et al., 2006; DiTommaso et al., 2003), and low self-esteem (Hojat, 1982). Researchers point out that international students' experience loneliness, desperation, and social exclusion more personally and socially. There needs to be research concurrently addressing the sense of belonging, loneliness, and social exclusion variables of international students in Türkiye. This study aims to reveal the relationship between the sense of belonging, loneliness, and social exclusion of international students in Türkiye.

Hypotheses

All hypotheses of this study are displayed according to Hayes Model 1 (Figure 1). Each arrow mark displays the relation between the variables.

General hypotheses regarding the research are stated as follows (Note: the concept of international students has been abbreviated as IS)

H1: General belonging significantly predicts social exclusion of the IS (ai).

H2: Social exclusion significantly predicts loneliness of the IS (bi).

H3: General belonging significantly predicts the IS's (c) loneliness levels.

H4: Social exclusion has a mediating effect between the general sense of belonging and levels of loneliness of the IS (ci).

Figure 1: Conceptual diagram of model 4 Hayes
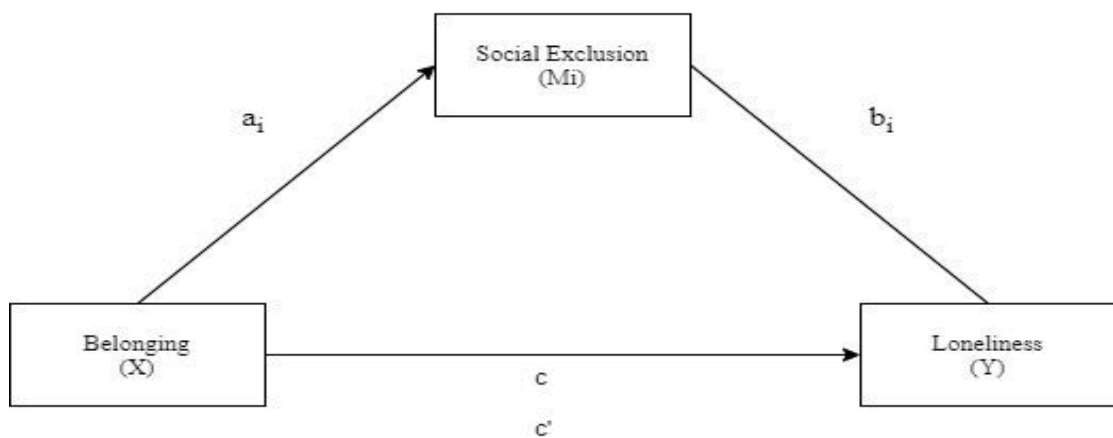
Note. X = independent variable, Y = dependent variable; M_i = mediator, indirect effect of X on Y through Mi = aibi; direct effect of X on Y after mediator = c'; direct effect of X on Y before mediator = c.

Method

Participants

Two hundred eighty-four university students studying in the public universities in Türkiye participated in the study voluntarily. The research sample of this study is limited to international undergraduate students. Following the receipt of the ethical permissions required for the research from the University Ethics Board, participants informed previously filled in a survey form consisting of demographic questions and ready-made scales.

Measurements

Personal Information Form

Drafted by the researchers includes information on the age, gender, grade levels in their respective departments of the students and the continents they come from.

General Belongingness Scale

The validity and reliability of the Turkish version of the scale developed by Malone Pillow & Osman (2012) was studied by Duru (2015). It has been stated that exploratory and confirmatory factor analyses confirm the two-factor structure of the scale. The scale covers two sub-dimensions as acceptance and rejection (exclusion). Moreover, the scale is composed of 12 items in total and is a 7-point Likert type. The Cronbach Alpha internal consistency coefficient for the whole scale was .92 while it was determined as .89 for the acceptance dimension and .91 for the rejection dimension. Under this study, Cronbach Alpha internal consistency coefficient was calculated as .88.

Social Exclusion Scale

This scale developed by Gilman et al. (2013) was adapted to Turkish by Akın, Uysal and Akın (2015). As a result of the CFA applied to test the construct validity of the scale, it was seen that it has a structure consisting of 11 items and two sub-dimensions as Negligence and Exclusion, similar to the original form of Social Exclusion Scale (x^2= 80.64, sd= 41, RMSEA= .056, NFI= .96, NNFI= .97, IFI=.98, RFI= .95, CFI= .98, GFI= .95, and SRMR= .048). The factor load values of the items in the assessment tool range from .71 to .88. Cronbach Alfa coefficient used to measure the internal consistency of the Social Exclusion Scale was determined as .89 for the whole scale. Item-total test correlations of the scale range from .51 to .70. Construct validity of the scale was tested among university students and as a result of the CFA, a structure similar to the one obtained with the Social Exclusion Scale by Akın et al. (2015) was acquired (χ^2 /df=4.87, RMSEA= .08, NFI= .93, IFI= .94, RFI= .91, CFI= .94, GFI= .93 and SRMR= .030). Under this study, the Cronbach Alpha coefficient was calculated as .91.

UCLA Loneliness Scale

Developed by Russell, Peplau, and Ferguson (1978), UCLA Loneliness Scale is a 4-point Likert-type scale and consists of 20 statements aiming to determine the general condition and loneliness level of the individual. This scale was revised by Russell, Peplau and Cutrona (1980) and finally by Russell (1996). Results of the third revision by Russell (1996) reveal that this version of the scale is quite reliable (α = 0.89 to 0.94, test-retest correlation 0.73). In the latest version of the scale, half of the statements were re-organized as affirmative and the rest as negative. The highest score that might be obtained from the scale was 80 while the lowest was 20. In parallel with the increase in the scores obtained in the scale, levels of loneliness also increase. In the study carried out by Demir (1989), the Cronbach Alpha internal consistency coefficient was calculated as 0.96. The test-retest reliability coefficient was found to be 0.94. Under this study, the Cronbach Alpha internal consistency coefficient was calculated as .75.

Data Analysis

To test the model established for examining the general sense of belonging of international students in terms of loneliness and social exclusion, measurements were made with simple regression analysis, using IBM SPSS 24 Hayes Process 3.5 version. Moreover, the correlation of the variables was measured with mean, standard deviation, Cronbach's α analysis and descriptive statistics.

Results

International undergraduate students participated in the research voluntarily and 127 (44.7%) of the students are female, while 157 (55.3%) are male. Students' ages range between 18 and 28. The mean age for the entire sample was found out to be 21.63 (±2.30). Table 1 displays the descriptive statistics regarding the variables considered to provide information about the structure of the sample.

Table 1. Frequency and percentage distribution of the demographic information on the sample group

Variables		1	2	3	4	5	6	Total
Gender		Male	Female					-
	N	157	127					284
	%	55.3	44.7					100
Age		18	19	20	21	22	23$^+$	-
	N	23	33	35	47	55	90	284
	%	8.1	11.6	12.3	16.5	19.4	31.8	100
Grade Level		1st Grade	2nd Grade	3rd Grade	4th Grade$^+$			-
	N	88	55	68	73			284
	%	31	19.4	23.9	25.7			100
Continents the Students Come From		Africa	Asia	Europe				-
	N	26	96	162				284
	%	9.2	33.8	57.0				100

Table 2 displays several descriptive statistics related to the variables of the research, and Cronbach's α coefficients of the scales in this study. This table reveals that the research provides the assumptions required for the analysis. It was determined that there is a negative relation between belonging and loneliness (r=-.626[**], *p<0.001.*), and also between belonging and social exclusion (r= -.593[**], *p<0.001.*), and there is a positive relationship between social exclusion and loneliness (r= .747[**], *p<0.001*). Moreover, it provides information on the research hypotheses (H1 – H2 – H3). It may be asserted that following these research steps, Hayes model 4 practice assumptions were obtained from the practice of the regression analysis.

Table 2. Correlations, descriptive statistics, and Cronbach's α for key study variables

Variables	1	2	3
1- Belonging	-	-	-
2- Loneliness	-.626[**]	-	-
3- Social Exclusion	-.593[**]	.747[**]	-
M	5.18	2.08	2.1
Sd	1.12	0.38	0.74
Cronbach's α	0.88	0.75	0.91

*Note. N= 284, ** p<0.001.*

Table 3 displays the results related to the mediation model. Moreover, it displays that there is a partial mediating effect of social exclusion in the relation between belonging and loneliness. Considering the total effect, pathway c (Figure 1) (Coeff= -0.214, *p<0.005 [-0.245, -0.183])* seems to be significant. Moreover, when the mediating variable is included in the analysis, it appears to have a significant effect on pathway c (Coeff= -0.096, *p<0.005 [-0.1274, -0.065])*. Pathway a_i between belonging and social exclusion (Coeff = -0.396, *p<0.005 [-0.4592, -0,333])* and pathway b_i between social exclusion and loneliness (*Coeff* = 0.2966, p<0.005 [0.25, 0.343)]) are statistically significant. In this study, it was found out that 61% (R^2= .6101) of loneliness could be explained by belonging and social exclusion.

Table 3. Total, direct, and indirect effects of belonging and social exclusion on loneliness

	Coeff	SE	t	p	LLCI	ULCI
Effect of Belonging on M1 (a_i) path	-0.396	0.032	-12.38	0.00	-0.4592	-0.333
Effect of M1 on Loneliness (b_i) path	0.2966	0.0237	12.535	0.00	0.25	0.343
The total effect of Belonging on Loneliness (c path)	-0.214	0.0159	-13.48	0.00	-0.245	-0.183
The direct effect of Belonging on Loneliness (c´path)	-0.096	0.0158	-6.094	0.00	-0.1274	-0.065
	Effect	BootSE			BootLLCI	BootULCI
The indirect effect of Belonging on Loneliness through M1	-0.118	0.0151			-0.1473	-0.089
R^2= ,6101						

Coeff coefficient, SE standard error, LLCI lower level of 95% confidence intervals, ULCL upper level of the 95% confidence intervals, Boot Bootstrap results, M1 Social Exclusion.

Discussion, Conclusion and Recommendations

In this research, relations among general belonging, loneliness, and social exclusion were addressed within a sample of students with international student status. It was displayed in the analysis results that social exclusion has a partial mediating role in the concerned variables. This study contributes to the field as it concurrently addresses belonging, loneliness, and social exclusion of international students, within the context of their mediating role.

In this study, as set forth by the hypotheses, general belonging has been related to social exclusion and loneliness. Moreover, this study revealed that a sense of belonging negatively relates to social exclusion (Baumeister et al., 2007; Pfundmair et al., 2015) and loneliness. As a result of the

analysis of the other hypothesis of the research, a positive relationship was determined between social exclusion and loneliness (Allen et al., 2020; Bangee et al., 2014; Wesselmann & Williams, 2017). It was observed that the findings are consistent with the literature. The negative relation between the research variables and the sense of belonging has been considered related to the vulnerable structure of the sense of belonging (Mudhovozi, 2011). Although the sense of belonging has a positive relation (Goodwin-Smith et al., 2019; Hystad & Carpiano, 2010; Lee & Huang, 2021; Smith et al., 2021) with many factors, this relation turns to negative with the effect of social exclusion (Portacolone et al., 2020). Although general belonging and loneliness are personal feelings (Baumeister & Leary, 1995), a factor with an external impact, such as social exclusion, may justify the direction of the relationship.

As in several studies on the mediating role of social exclusion, this study also addresses its effect on dependent variables (Allen et al., 2020; Mann & Walker, 2022; Szkody & Mckinney, 2019; Walsh et al., 2020). A negative effect of social exclusion has also been observed in this study. This may be the result of the disruptive effect of social exclusion on people in social environments (Baumeister & Leary, 1995; Hill, 2006; Levett-Jones et al., 2007). This study found that social exclusion acts as a mediator in the process of general belonging and loneliness, and it affects loneliness significantly. On the other hand, this study is the first to reveal the mediating effect of social exclusion together with belonging in explaining the loneliness of international students. These conclusions are important to notice that these may lead to adverse outcomes for Turkish universities hosting international students (Baumeister et al., 2007).

The difficulty of being a student, mainly an international student, is a challenging matter of study because of the nature of this field. It is suggested that universities ensure a school environment where international students can integrate into life without being excluded, due to the language difficulties affecting the academic success of international students, their school attendance, and continuity. As known, belonging is closely related to the cultural environment (Ivanova & Kokina, 2016). Research has pointed out that many factors play a role in social exclusion's emergence (Lew-Williams, 2017; Williams, 2009). Carrying out research on areas where international students may experience social exclusion at universities will have a positive effect on belonging, and thus, it is foreseen to reduce loneliness to a large extent. Recognizing the mediating role of loneliness, institutions should expand mental health support services tailored to the unique needs of international students. This includes culturally sensitive counseling services and awareness campaigns to reduce the stigma associated with seeking mental health assistance (Kuşci & Oğuz Duran, 2022). Academic staff and administrators should receive cross-cultural training to better understand the challenges faced by international students. This training should emphasize the importance of creating an inclusive and supportive academic environment. This research has some limitations. It is not known whether the participants filling in the declarative Likert-type scales had difficulty in perceiving the questions,

despite having passed the language test. Finally, participants coming from different continents make it difficult to generalize the results.

Policy Implications

The findings of this research underscore the importance of developing and strengthening integration programs for international students. Academic institutions should consider allocating resources to establish comprehensive orientation programs that address both academic and social aspects of student life. Such programs should focus on fostering a sense of belonging and facilitating interactions among international and domestic students. Universities should implement proactive measures to monitor and mitigate social exclusion among international students. This may include the establishment of reporting mechanisms for incidents of exclusion, discrimination, or harassment. Policies should be in place to address such incidents promptly and provide support to affected students. Policies should encourage and require such training as part of professional development. Institutions should consider implementing and funding mentorship initiatives where experienced international students can assist newcomers in their academic and social integration. These programs can help alleviate feelings of loneliness and reduce social exclusion. Universities should review and update their diversity and inclusion policies to ensure they explicitly address the needs of international students. These policies should promote diversity, equity, and inclusion across all aspects of campus life, from curriculum design to extracurricular activities. Academic institutions should collaborate with international student organizations to gain insights and involve students in the development and evaluation of policies and programs. This collaboration can help ensure that policies are student-centered and responsive to their needs. These policy implications are based on the findings of this research and aim to provide a comprehensive framework for supporting the well-being of international students.

Conflict of Interest

There is no conflict of interest declared by the authors of the article.

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Ethical Statement

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Credit Author Statement

All authors have contributed equally to the article.

References

Akın, A. Uysal, R. ve Akın, Ü. (2015). Ergenler için ostrasizm ölçeği'nin Türkçe'ye uyarlanması. *Kastamonu Eğitim Dergisi, 24*(2), 895-904.

Allen, K. A., & Kern, M. L. (2017). *School belonging in adolescents: Theory, research and practice*. Springer Singapore.

Allen, S. F., Gilbody, S., Atkin, K., & van der Feltz-Cornelis, C. (2020). The associations between loneliness, social exclusion and pain in the general population: A N=502,528 cross-sectional UK Biobank study. *Journal of Psychiatric Research*, *130*, 68-74. https://doi.org/10.1016/j.jpsychires.2020.06.028

Anandavalli, S. (2021). Strengths-based counseling with international students of color: A community cultural wealth approach. *Journal of Asia Pacific Counseling*, *11*(1), 111-124. https://doi.org/10.18401/2021.11.1.7

Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology, 94*(4), 795–809. https://doi.org/10.1037/0022-0663.94.4.795

Annamalai, N., Kabilan, M. K., Rashid, R. A., Oleskevicience, G. V., & Vaičiūnienė, V. (2021). English language learning through non-technology games: A case study of international students at a Lithuanian university. *Qualitative Report*, *26*(10), 3261-3278. https://doi.org/10.46743/2160-3715/2021.4986

Bani Ahmad, T., & Meriç, M. (2021). The effect of an online psychoeducational stress management program on international students' ability to cope and adapt. *Perspectives in Psychiatric Care*. https://doi.org/10.1111/ppc.12735

Bangee, M., Harris, R. A., Bridges, N., Rotenberg, K. J., & Qualter, P. (2014). Loneliness and attention to social threat in young adults: Findings from an eye tracker study. *Personality and Individual Differences, 63,* 16–23. https://doi.org/10.1016/j.paid.2014.01.039

Barg, S. J. (2013). *Expetations vs. reality: A study about Chinese student's expectations and experiences at a Midwestern University in America.* [Unpublished doctoral dissertation]. University of Nebraska.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Baumeister, R. F., Brewer, L. E., Tice, D. M., & Twenge, J. M. (2007). Thwarting the need to belong: Understanding the interpersonal and inner effects of social exclusion. *Social and Personality Psychology Compass, 1*(1), 506–520. https://doi.org/10.1111/j.1751-9004.2007.00020.x

Bogaerts, S., Vanheule, S., & Desmet, M. (2006). Feelings of subjective emotional loneliness: An exploration of attachment. *Social Behavior and Personality: An International Journal, 34*(7), 797–812. https://doi.org/10.2224/sbp.2006.34.7.797

Booker, K. C. (2007). Likeness, comfort, and tolerance: Examining African American adolescents' sense of school belonging. *The Urban Review*, *39*(3), 301-317.

Bossi, F., Gallucci, M., & Ricciardelli, P. (2018). How social exclusion modulates social information processing: A behavioural dissociation between facial expressions and gaze direction. *PLoS ONE, 13*(4), Article e0195100. https://doi.org/10.1371/journal.pone.0195100

Brennan, T. (1982). Loneliness at adolescence. In Peplau, L. A., and Perlman, D. (eds.), *Loneliness: A Sourcebook of Current Theory, Research and Therapy,* Wiley.

Cerna, L. (2014). Attracting high-skilled immigrants: Policies in comparative perspective. *International Migration*, *52*(3), 69-84. https://doi.org/10.1111/imig.12158

Cho, H. J., Levesque-Bristol, C., & Yough, M. (2021). International students' self-determined motivation, beliefs about classroom assessment, learning strategies, and academic adjustment in higher education. *Higher Education*, *81*(6), 1215-1235. https://doi.org/10.1007/s10734-020-00608-0

Cicognani, E., Klimstra, T., & Goossens, L. (2014). Sense of community, identity statuses, and loneliness in adolescence: A cross-national study on Italian and Belgian youth. *Journal of Community Psychology*, *42*(4), 414-432. https://doi.org/10.1002/jcop.21618

Demir, A. (1989). UCLA yalnızlık ölçeğinin geçerlik ve güvenirliği. *Psikoloji Dergisi*, *7*(23), 14-18.

Deniz, M., Hamarta, E., & Ari, R. (2005). An investigation of social skills and loneliness levels of university students with respect to their attachment styles in a sample of Turkish students. *Social Behavior and Personality: An International Journal*, *33*(1), 19-32. https://doi.org/10.2224/sbp.2005.33.1.19

Dill, J. C., & Anderson, C. A. (1999). Loneliness, shyness, and depression: The etiology and interrelationships of everyday problems in living. In T. Joiner & J. C. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 93–125). American Psychological Association. https://doi.org/10.1037/10311-004

DiTommaso, E., Brannen-McNulty, C., Ross, L., & Burgess, M. (2003). Attachment styles, social skills and loneliness in young adults. *Personality and Individual Differences, 35*(2), 303–312. https://doi.org/10.1016/S0191-8869(02)00190-3

Duru, E. (2015). Genel aidiyet ölçeğinin psikometrik özellikleri: Geçerlik ve güvenirlik çalışması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 5(44), 37-47.

Erichsen, E. A. & Bollinger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development. 59*. 309–326. https://doi.org/10.1007/s11423- 010-9161-6.

Faircloth, B. S., & Hamm, J. V. (2005). Sense of belonging among high school students representing 4 ethnic groups. *Journal of Youth and Adolescence, 34*(4), 293–309. https://doi.org/10.1007/s10964-005-5752-7

Gilman, R., Carter-Sowell A., DeWall, N., Adams, R., ve Carboni I. (2013). Validation of the Ostracism Experiences Scale for adolescents. *Psychological Assessment, 25*(2), 319-330. https://doi.org/10.1037/a0030913

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence, 13*(1), 21–43. https://doi.org/10.1177/0272431693013001002

Goodwin-Smith, I., Hill, K., Due, C., Waterford, M., Corrales, T., Wood, L., Yourell, T., & Ho, C. (2019). "I'm not a barcode or case file number": Understandings of perceived social support and belonging within disadvantaged adolescents and young adults. *Journal of Family Studies*, *25*(4), 351-367. https://doi.org/10.1080/13229400.2016.1268191

Hagerty, B. M., & Williams, A. (1999). The effects of sense of belonging, social support, conflict, and loneliness on depression. *Nursing Research*, *48*(4), 215-219. https://doi.org/10.1097/00006199-199907000-00004

Hagerty, B. M., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing, 10*(4), 235–244. https://doi.org/10.1016/S0883-9417(96)80029-X

Hill, D. L. (2006). Sense of belonging as connectedness, American Indian worldview, and mental health. *Archives of Psychiatric Nursing, 20*(5), 210–216. https://doi.org/10.1016/j.apnu.2006.04.003

Hojat, M. (1982). Loneliness as a function of selected personality variables. *Journal of Clinical Psychology, 38*(1), 137–141. https://doi.org/10.1002/1097-4679(198201)38:1<137::AID-JCLP2270380122>3.0.CO;2-2

Hystad, P., & Carpiano, R. M. (2010). Sense of community-belonging and health-behaviour change in Canada. *Journal of Epidemiology & Community Health*, *66*(3), 277-283. https://doi.org/10.1136/jech.2009.103556

Ivanova, M. & Kokina, I. (2016). The analysis of organizational culture values in public sectors in Latvia. *Review of Innovation and Competitiveness, 2* (4), 19-36. https://doi.org/10.32728/ric.2016.24/2

Jones, W. H., Hobbs, S. A., & Hockenbury, D. (1982). Loneliness and social skill deficits. *Journal of Personality and Social Psychology, 42*(4), 682–689. https://doi.org/10.1037/0022-3514.42.4.682

Kayser-Jones, J. S., & Abu-Saad, H. (1982). Loneliness: Its relationship to the educational experience of international nursing students in the United States. *Western Journal of Nursing Research*, *4*(3), 301-315. https://doi.org/10.1177/019394598200400304

Kuşci, İ. & Oğuz Duran, N. (2022). Kültürel tevazu ölçeğinin Türkçeye uyarlanması için bir ön çalışma. *Iğdır Üniversitesi Sosyal Bilimler Dergisi , (29)* , 97-109. https://doi.org/10.54600/igdirsosbilder.1020965

Lee, C.-K. J., & Huang, J. (2021). The relations between students' sense of school belonging, perceptions of school kindness and character strength of kindness. *Journal of School Psychology*, *84*, 95-108. https://doi.org/10.1016/j.jsp.2020.12.001

Lee, J. S. (2017). Challenges of international students in a Japanese university: Ethnographic perspectives. *Journal of International Students*, *7*(1), 73-93. https://doi.org/10.32674/jis.v7i1.246

Lee, J. J., & Rice, C. (2007). Welcome to America? International student perceptions of discrimination. *Higher Education*, *53*(3), 381-409. https://doi.org/10.1007/s10734-005-4508-3

Leong, P. (2015). Coming to America: assessing the patterns of acculturation, frienship formation, and the academic experiences of international students at a US college. *Journal of International Students, 5*(4), 459-474. https://doi.org/10.32674/jis.v5i4.408

Levett-Jones, T., Lathlean, J., Maguire, J., & McMillan, M. (2007). Belongingness: A critique of the concept and implications for nursing education. *Nurse Education Today*, *27*(3), 210-218. https://doi.org/10.1016/j.nedt.2006.05.001

Lew-Williams, B. (2017). "Chinamen" and "Delinquent Girls": Intimacy, exclusion, and a search for California's color line. *The Journal of American History*, *104*(3), 632-655. https://doi.org/10.1093/jahist/jax312

Li, H., Fox, R.F. & Almarza, D.J. (2007). Strangers in Stranger Lands: Language, Learning, Culture. *International Journal of Progressive Education, 3*(1), 6-28.

Malone, G. P., Pillow, D. R., & Osman, A. (2012). The general belongingness scale (GBS): Assessing achieved belongingness. *Personality and Individual Differences, 52*(3), 311–316. https://doi.org/10.1016/j.paid.2011.10.027

Mann, L. M., & Walker, B. R. (2022). The role of equanimity in mediating the relationship between psychological distress and social isolation during COVID-19. *Journal of Affective Disorders*, *296*, 370-379. https://doi.org/10.1016/j.jad.2021.09.087

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

Matic, D., & Russell, G. M. (2020). How do I go back? Psychotherapy with international students who face stigma upon their return home. *Journal of College Student Psychotherapy, 34*(2), 138–156. https://doi.org/10.1080/87568225.2019.1574216

Matsunaga, K., Barnes, M. M., & Saito, E. (2021). Exploring, negotiating and responding: International students' experiences of group work at Australian universities. *Higher Education*, *81*(5), 989-1006. https://doi.org/10.1007/s10734-020-00592-5

Mehra, B. & Bishop, A.P. (2007). Cross-Cultural perspectives of international doctoral students: Two-Way learning in library and information science education . *International Journal of Progressive Education, 3*(1), 44-64.

Mellor, D., Stokes, M., Firth, L., Hayashi, Y., & Cummins, R. (2008). Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences, 45*(3), 213–218. https://doi.org/10.1016/j.paid.2008.03.020

Mori, S. (C.). (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development, 78*(2), 137–144. https://doi.org/10.1002/j.1556-6676.2000.tb02571.x

Morrow, J., & Ackermann, M. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal*, *46*(3), 483-491.

Mudhovozi, P. (2011). Adjustment experiences of international students at a South African university. *Journal of Psychology in Africa*, *21*(2), 293-296. https://doi.org/10.1080/14330237.2011.10820458

Neel, C. G. O., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development*, *84*(2), 678-692. https://doi.org/10.1111/j.1467-8624.2012.01862.x

OECD. (2016). Education at a glance 2016. OECD indicators. OECD Publishing. https://www.oecd-ilibrary.org/education/education-at-a-glance2016_eag-2016-en

Oğuz Duran, N., & Kuşci, İ. (2021). Motivasyon., In K. Karataş (Ed.) *Eğitim ve 21.Yüzyıl Becerileri* (pp. 203-233) Nobel Akademik Yayıncılık.

Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, *70*(3), 323-367. https://doi.org/10.3102/00346543070003323

Özoğlu, M., Gür, B. S., & Coşkun, İ. (2015). Factors influencing international students' choice to study in Türkiye and challenges they experience in Türkiye. *Research in Comparative and International Education*, *10*(2), 223-237.

Pedersen, P. B. (1991). Counseling international students. *The Counseling Psychologist, 19*(1), 10–58. https://doi.org/10.1177/0011000091191002

Pfundmair, M., Graupmann, V., Frey, D., & Aydin, N. (2015). The different behavioral intentions of collectivists and individualists in response to social exclusion. *Personality and Social Psychology Bulletin, 41*(3), 363–378. https://doi.org/10.1177/0146167214566186

Portacolone, E., Johnson, J. K., Halpern, J., & Kotwal, A. (2020). Seeking a sense of belonging. *Generations*, *44*(3), 1-8.

Raja, R., Zhou, W., Li, X. Y., Ullah, A., & Ma, J. (2021). Social identity changes as an integration strategy of international students in China. *International Migration*, *59*(5), 230-247. https://doi.org/10.1111/imig.12827

Ren, J., & Hagedorn, L. S. (2012). International graduate students' academic performance: What are the influencing factors? *Journal of International Students*, *2*(2), 135-143. https://doi.org/10.32674/jis.v2i2.526

Ren, D., Hales, A.H., & Williams, K.D. (2017). Ostracism: Being ignored and excluded. In, K.D. Williams & S.A. Nida (Eds.), *Ostracism, Exclusion, and Rejection* (pp. 10-29). Taylor & Francis.

Richters, E., & Teichler, U. (2006). Student mobility data: Current methodological issues and future prospects. *EURODATA: Student Mobility in European Higher Education*, 78-95.

Rokach, A. & Spirling, S. (2016). *Feeling inadequate and alone: The effects of university induced loneliness.* York university, Canada Center for Academic studies. Ben-tham Science Publishers- Sharjah,

Rogers, C. (2014). The process of the encounter group. *Education for Adults: Volume 1 Adult Learning and Education*, *83*, 203.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*(1), 20–40. https://doi.org/10.1207/s15327752jpa6601_2

Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment, 42*(3), 290–294. https://doi.org/10.1207/s15327752jpa4203_11

Ryan, M. C., & Patterson, J. (1987). Loneliness in the elderly. *Journal of Gerontological Nursing*, *13*(5), 6-9. https://doi.org/10.3928/0098-9134-19870501-04

Satan, A. (2020). The Mediating Role of Social Connectedness in the Relationship between University Students' Parental Acceptance / Rejection Perceptions and Loneliness Perceptions: A Structural Equation Model Study . *Educational Policy Analysis and Strategic Research, 15*(3), 456-481. https://doi.org/10.29329/epasr.2020.270.22

Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education*, *12*(2), 148-180. https://doi.org/10.1177/1028315307299699

Sherry, M., Thomas, P., & Chui, W. H. (2010). International students: A vulnerable student population. *Higher education*, *60*(1), 33-46. https://doi.org/10.1007/s10734-009-9284-z

Smith, D., Leonis, T., & Anandavalli, S. (2021). Belonging and loneliness in cyberspace: Impacts of social media on adolescents' well-being. *Australian Journal of Psychology*, 73(1), 12-23. https://doi.org/10.1080/00049530.2021.1898914

Stokes, H., Griner, D., Smith, T. B., Beecher, M. E., Allen, G. E. K., Cox, J., Hobbs, K., & Kirtley, N. (2021). Psychotherapy utilization and presenting concerns among international Asian and Asian American students in a university counseling center. *Journal of College Student Psychotherapy, 35*(2), 118-135. https://doi.org/10.1080/87568225.2019.1650681

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. Norton.

Szkody, E., & Mckinney, C. (2019). Social support versus emotion regulation: Mediators of attachment and psychological problems after social exclusion. *Journal of Social & Clinical Psychology*, *38*(10), 882-905. https://doi.org/10.1521/jscp.2019.38.10.882

Şahin, M., & Demirtaş, H. (2014). Üniversitelerde yabancı uyruklu öğrencilerin akademik başarı düzeyleri, yaşadıkları sorunlar ve çözüm önerileri. *Milli Eğitim Dergisi*, *44*(204), 88-113.

Tananuraksakul, N., & Hall, D. (2011). International students' emotional security and dignity in an Australian context: An aspect of psychological well-being. *Journal of Research in International Education*, *10*(2), 189-200. https://doi.org/10.1177/1475240911410784

Tchoh, B. K., & Mertan, E. B. (2018). Understanding the relationship between self-construals, self-esteem, social support, and the sociocultural adaptation of African students in Northern Cyprus. *Journal of International Students*, *8*(2), 795-820. https://doi.org/10.32674/jis.v8i2.114

Tomaka, J., Thompson, S., & Palacios, R. (2006). The relation of social isolation, loneliness, and social support to disease outcomes among the elderly. *Journal of Aging and Health*, *18*(3), 359-384. https://doi.org/10.1177/0898264305280993

UNESCO Institute for Statistics (UIS) (2009). Global Education Digest 2009: Comparing Education Statistics Across the World, Kanada.

Walsh, K., O'Shea, E., & Scharf, T. (2020). Rural old-age social exclusion: A conceptual framework on mediators of exclusion across the lifecourse. *Ageing & Society*, *40*(11), 2311-2337. https://doi.org/10.1017/S0144686X19000606

Wawera, A.-S., & McCamley, A. (2020). Loneliness among international students in the UK. *Journal of Further & Higher Education*, *44*(9), 1262-1274. https://doi.org/10.1080/0309877X.2019.1673326

Wesselmann, E. D., & Williams, K. D. (2017). Social life and social death: Inclusion, ostracism, and rejection in groups. *Group Processes & Intergroup Relations, 20*(5), 693–706. https://doi.org/10.1177/1368430217708861

Williams, C. (2009). From transmitted deprivation to social exclusion: Policy, poverty and parenting. *Journal of Social Policy, 38*(3), 537-538. https://doi.org/10.1017/S0047279409003158

Williams, K.D. (2001). *Ostracism: The Power of Silence*. Guilford Press.

Wu, M.-Y., Zhai, J., Wall, G., & Li, Q.-C. (2021). Understanding international students' motivations to pursue higher education in mainland China. *Educational Review*, *73*(5), 580-596. https://doi.org/10.1080/00131911.2019.1662772

Wu, H. P., Garza, E., & Guzman, N. (2015). International student's challenge and adjustment to college. *Education Research International*, *2015*. https://doi.org/10.1155/2015/202753

Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly, 16*(1), 15–28. https://doi.org/10.1080/0951507031000114058

Yoon, E., Jung, K. R., Lee, R. M., & Felix-Mora, M. (2012). Validation of social connectedness in mainstream society and the ethnic community scales. *Cultural Diversity and Ethnic Minority Psychology, 18*(1), 64–73. https://doi.org/10.1037/a0026600

Young, J.E. (1982). Loneliness, depression and cognitive therapy: Theory and application. In, L. A. Peplau and D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp.379-406). Wiley.

YÖK, (2019). Yükseköğretim bilgi yönetim sistemi. https://istatistik.yok.gov.tr/

Zhong, W., & Cheng, M. (2021). Developing critical thinking: Experiences of Chinese international students in a Post-1992 university in England. *Chinese Education & Society*, *54*(3/4), 95-106. https://doi.org/10.1080/10611932.2021.1958294