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Authors: Liao Shanhui, Hu Xiaomeng, Hu Xiaomeng

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Abstract

Overseas Chinese students constitute a substantial and widely distributed population, with issues arising frequently. Compounded by the impact of the COVID-19 pandemic, the living circumstances of overseas Chinese students are concerning, with mental health, cultural adaptation, and social discrimination being particularly salient issues. This paper seeks to systematically examine, from a cultural psychology perspective, the psychological benefits and costs that the study-abroad experience confers upon individuals. Research indicates that individuals with study-abroad experience demonstrate enhanced cross-cultural competence, greater personality openness, and stronger self-efficacy; however, such experience also predisposes individuals to heightened anxiety and depression, diminished social support, increased loneliness, and heightened perception of prejudice and discrimination from outgroups. We will review these psychological benefits and costs, dissect the underlying psychological mechanisms, and thereby provide scientific questions, theoretical frameworks, and empirical references for academic research and policy development concerning the psychological dimensions of international students.

Full Text

The Psychological Benefits and Costs of Studying Abroad: A Cultural Psychology Perspective

Shanhui Liao¹, Xiaomeng Hu¹

(¹ Department of Psychology, Renmin University of China, Beijing, 100872)

Abstract

The population of Chinese international students overseas is massive, widely distributed, and faces frequent challenges. Compounded by the impact of the

COVID-19 pandemic, the living conditions of Chinese students abroad are concerning, with issues related to mental health, cultural adaptation, and social discrimination being particularly salient. This paper seeks to systematically review, from a cultural psychology perspective, the psychological benefits and costs that studying abroad brings to individuals. Research indicates that individuals with study abroad experience exhibit higher cross-cultural competence, greater personality openness, and stronger self-efficacy. However, such experiences also increase the likelihood of anxiety and depression, reduce social support, intensify feelings of loneliness, and heighten perceptions of outgroup prejudice and discrimination. We will review these psychological benefits and costs, analyze the underlying psychological mechanisms, and aim to provide scientific questions, theoretical frameworks, and empirical references for academic research and policy formulation concerning international student mental health.

Keywords: studying abroad, psychological benefits, psychological costs, influence mechanisms, cross-cultural competence

Classification Number: B849:C91

1. Introduction

With the wave of globalization and China's economic prosperity, the number of Chinese students studying abroad has grown rapidly. China has become the world's largest source country for international students. According to data released by the Ministry of Education, 662,100 Chinese students studied abroad in 2018, representing an 8.88% year-over-year increase, with continued growth in 2019—preliminary estimates suggest approximately 710,000 students went abroad that year, bringing the total number of overseas Chinese students to around 890,000. The Institute of International Education's *2019 Open Doors Report* revealed that during the 2018-2019 academic year, the number of international students in the United States reached a historic high of 1,095,299, accounting for 5.5% of the total U.S. higher education population. For the tenth consecutive year, China remained the largest source country, with Chinese students comprising 33.7% of all international students in the United States.

Given the large scale, wide distribution, and frequent problems among overseas students, coupled with the ongoing severity of the pandemic abroad, the psychological issues of this population warrant particular attention from psychologists. According to the *White Paper on Mental Health of Chinese Students in North America* (2020) jointly published by the China-U.S. Youth Summit and BeenThere amid the pandemic, nearly half of Chinese students in North America experienced moderate stress, while one-quarter reported high stress levels under the dual pressures of the pandemic and rising xenophobia. Average indices of depression and anxiety approached levels of mild anxiety and moderate depression. Approximately 60% reported deteriorating mental health during the pandemic, feeling anxious and stressed; 80% significantly increased their screen time; 60% experienced declining sleep quality; and 40% reported decreased appetite. These findings underscore that the mental health issues of

Chinese students during the pandemic cannot be ignored, requiring psychologists to conduct more academic research and practical interventions to provide scientific recommendations for improving international students' mental health, cultural adaptation, and well-being, and to offer references for international educators and counseling practitioners.

In recent years, psychological research on international students has grown rapidly, with numerous cultural psychology studies focusing on Chinese students abroad accumulating theoretical frameworks and empirical findings that warrant systematic review to inform future research. Current psychological research on international students primarily concentrates on acculturation issues, such as psychological adjustment in foreign countries, major acculturative stressors, individual and social factors that cause or exacerbate acculturative stress, and methods to alleviate such pressure (Wang & Mallinckrodt, 2006; Lee & Ciftci, 2014; Kashima & Loh, 2006; Billedo et al., 2020; Zhang & Goodson, 2011). International students' mental health status has also attracted scholarly attention, with numerous studies examining the effectiveness of psychological interventions (Choy & Alon, 2018; Khosravi et al., 2018; Elemo & Türküm, 2019; Zhuang et al., 2019; Xu et al., 2020). Additionally, the psychological reshaping and behavioral changes resulting from study abroad experiences have become increasingly important research topics. With the rising tide of studying abroad, scholars have investigated both the benefits and potential negative psychological effects of these experiences (Yang et al., 2011; Smith & Khawaja, 2011; Lee et al., 2012; Mapp, 2013). Naturally, overseas study focuses on academic learning, and research has also addressed international students' satisfaction with foreign teaching, their learning outcomes, study patterns, and academic stress management (Ding, 2016; Sam, 2001). Finally, scholars have examined the decision-making mechanisms behind students' choices to study abroad (María Cubillo et al., 2006; Jiani, 2016).

This paper focuses on the core issue of how studying abroad influences individual psychology and behavior. From a cultural psychology perspective, we review and evaluate relevant research findings to clarify the psychological benefits and costs of study abroad experiences and explore the mechanisms and boundary conditions of these effects, providing new insights for academic theory, practical application, and policy formulation. Theoretically, studying abroad represents a form of multicultural experience. Researchers have noted that multicultural experiences have a double-edged sword effect (Hu, Han, Yu, & Peng, in press): when individuals possess rich multicultural experiences, particularly those with breadth or depth, they can gain numerous psychological benefits such as increased cognitive flexibility, enhanced generalized trust, reduced outgroup prejudice, improved creativity, and growth mindset. However, under certain boundary conditions, multicultural experiences may also lead to negative psychological effects including cultural identity threat, maladjustment, and increased unethical behavior. Study abroad is a special type of multicultural experience, distinct from immigrant, colonized, or ethnic minority groups. The core motivation for studying abroad is to access higher-quality educational resources and experi-

ence foreign cultures, leaving one's familiar home culture for a foreign host culture. How, then, does this experience transform individuals' original psychological processes and behavioral patterns? What are the underlying psychological mechanisms? By reviewing previous empirical research, this paper helps researchers better understand the psychological and behavioral changes brought about by studying abroad and their internal mechanisms, offering new insights for subsequent theoretical construction, empirical research, and methodological paradigms. Practically, understanding the deep psychological changes experienced by Chinese international students from a cultural psychology perspective can help us better comprehend this group's psychological journey, thereby assisting them in reducing reverse culture shock upon return, facilitating employment and re-adaptation to Chinese society, and providing scientific guidance for their post-return lives.

2. Psychological Benefits of Studying Abroad

The influence of studying abroad on individual psychology and behavior is undoubtedly complex, multifaceted, and dynamic, encompassing both benefits and costs. Below we systematically review relevant research findings to provide reference for future research and knowledge translation.

2.1 Cross-cultural Competence

Research demonstrates that study abroad experiences enhance individuals' cross-cultural sensitivity, awareness, competence, and cultural intelligence. Medina-López-Portillo (2004) employed a mixed-methods case study design to compare cross-cultural sensitivity before and after, and between, two groups of students: 18 students in a 7-week summer language program in Taxco, Mexico, and 10 students in a 16-week semester program in Mexico City. Results revealed varying degrees and directions of change in cross-cultural sensitivity and target culture cognition, with both groups showing increased cross-cultural sensitivity after studying abroad, and most students in the longer program reaching higher stages of cross-cultural competence. Ang et al. (2015) adapted the Multicultural Personality Questionnaire (MPQ) framework to examine international students' adaptation to China's socio-cultural and educational environment, measuring adaptation across five dimensions: (1) cultural empathy, (2) open-mindedness, (3) emotional stability, (4) social flexibility, and (5) language proficiency. The study found that as time in China increased, international students became more culturally sensitive, with cultural empathy gradually improving over time.

Kitsantas and Meyers (2001) explored the impact of study abroad on students' cross-cultural awareness using the Cross-Cultural Adaptability Inventory (CCAI) to measure cross-cultural awareness before and after programs, comparing study abroad participants with domestic students both horizontally and longitudinally. Results showed that students studying abroad scored higher than domestic controls on all CCAI subscales measuring emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy; moreover,

study abroad students' post-program scores were significantly higher than their initial scores, demonstrating that study abroad programs enhance cross-cultural adaptability. Mapp (2013) used a pre-post design to quantitatively assess the impact of short-term study abroad programs on undergraduates' cross-cultural adaptability, also employing the CCAI. The study found significant changes across all subscales and total scores after short-term programs, supporting the conclusion that such programs improve cross-cultural adaptability, with emotional resilience showing the greatest change. Interestingly, program duration, whether the destination was an English-speaking country, and prior international experience did not affect these results.

Yang et al. (2011) examined the effect of study abroad on cross-cultural competence using mixed methods—questionnaires and focus groups—to survey 214 undergraduates studying, interning, or volunteering in 20 countries about their program goals, experiences, and perceived benefits. The study found that study abroad enhanced cross-cultural competence. Nguyen et al. (2018) investigated the effect of study abroad on cultural intelligence (CQ) using a mixed design to examine short-term programs' impact on multicultural versus monocultural individuals. Tracking 79 participants, they found that study abroad improved CQ in monocultural but not multicultural individuals. These findings suggest that cross-cultural sensitivity, adaptability, and competence increase with time abroad and depth of cultural contact. However, as cross-cultural competence is a multidimensional construct, research on mediating or moderating factors remains limited, leaving the underlying psychological processes unclear.

2.2 Personality Openness

Other research shows that study abroad influences personality development. Zimmermann and Neyer (2013) used a prospective control group design to track personality changes among three groups: short-term sojourners (one semester), long-term sojourners (one academic year), and a control group. Results indicated that both short- and long-term study abroad increased openness and agreeableness while decreasing neuroticism.

However, some scholars find that study abroad does not necessarily increase openness. Ying (2002) tracked 97 Taiwanese students in the United States, surveying them before departure, after one year, and after two years. The study found increases in internality and self-actualization, but no overall decrease in norm preference. However, an interaction between study abroad and gender emerged: the experience reduced social norm preference among women but had little effect on men, suggesting that women adapted to American culture while men maintained previous social norms. Niehoff et al. (2017) used repeated measures to examine the relationship between study abroad and Big Five personality changes, tracking both study abroad and non-study abroad students with the German Big Five Inventory. They found that study abroad increased extraversion and agreeableness while decreasing neuroticism, but had no effect on openness. Additionally, initial conscientiousness levels substantially inter-

acted with study abroad: students with low initial conscientiousness showed increases, while those with high initial levels showed decreases, with post-return conscientiousness averaging near normative levels. An et al. (2015) surveyed international students at a Chinese university and found no significant changes in openness or social flexibility over time. These results indicate that while study abroad affects personality development, it does not necessarily cause significant changes in all personality dimensions, suggesting boundary conditions such as gender, baseline levels, acculturation status, and social interaction patterns. Future research requires more sophisticated designs and measurement to develop stronger theoretical frameworks examining the relationship between study abroad and personality change.

2.3 Self-efficacy

Scholars have also found that study abroad enhances self-efficacy. Mapp (2013) used a mixed design to examine short-term study abroad's impact on self-efficacy among multicultural and monocultural individuals. Tracking 79 participants, the study found that study abroad improved overall self-efficacy in monocultural but not multicultural individuals. Petersdotter et al. (2017) conducted repeated measures of self-efficacy among students studying abroad for one semester versus those studying domestically, with approximately six months between measurements. Results showed that studying abroad was a significant predictor of self-efficacy at the second measurement, a conclusion that held even after controlling for personality differences between the groups.

2.4 Self-awareness and Cultural Identity Reconstruction

Research also demonstrates that studying abroad enhances self-awareness and promotes cultural identity reconstruction. Yang et al. (2011) used mixed methods to survey 214 undergraduates in 20 countries about their pre-departure goals, experiences, and perceived benefits, finding that study abroad increased self-awareness and personal independence. Gieser (2015) used semi-structured interviews to study nine American students in South Africa, finding that study abroad strengthened self-awareness and understanding of cultural differences while validating that the experience prompted re-examination of American identity, as social contact in a foreign land enables deeper reflection on one's social identity. Petersdotter et al. (2017) conducted three rounds of interviews over one year with 17 Chinese students at German universities. The study revealed that while students showed varying degrees of cross-cultural adaptation, most strengthened their core cultural identity—Chinese identity—more than their identification with other cultures. These intriguing findings reveal that exposure to foreign cultures and interaction with cultural elements or members substantially impacts not only daily life (e.g., food, clothing, housing) but also the self and cultural identity. Foreign cultures may enhance self-affirmation needs, trigger cultural identity threat, and thereby strengthen original cultural identity while constructing new identity systems. However, current research relies too heav-

ily on questionnaires and qualitative interviews; more longitudinal data and experimental evidence are needed for stronger conclusions.

2.5 Positive Attitudes Toward Academics

Research shows that study abroad can help students recognize the intrinsic value of education and increase academic focus. Hadis (2005) surveyed university students who studied abroad between Fall 1997 and Summer 2002 via online questionnaires to assess academic impacts. Based on respondents' reports, nearly half indicated they became more academically focused after studying abroad, and over half reported that upon returning, they studied more for "the joy of acquiring knowledge" than for grades.

3. Psychological Costs of Studying Abroad

3.1 Anxiety, Depression, and Physical Symptoms

Smith and Khawaja (2011) noted in their review of international students' acculturation experiences that acculturative stress negatively impacts psychological and sociocultural adaptation. While the exact manifestations of acculturative stress remain unclear, previous research indicates it can appear in multiple forms. For instance, international students experiencing acculturative stress report physical symptoms such as sleep and appetite disorders, fatigue, headaches, elevated blood pressure, and gastrointestinal problems. Acculturative stress also causes psychological symptoms including loneliness, helplessness, hopelessness, sadness, loss, anger, disappointment, and low self-esteem, which in severe cases can lead to clinical depression. Han et al. (2013) conducted an anonymous survey of 130 Chinese students at Yale University, finding that 45% reported depressive symptoms and 29% reported anxiety symptoms.

3.2 Reduced Social Support and Increased Loneliness

Smith and Khawaja's (2011) literature review identified reduced social support as a major psychological cost for international students. Research shows that personality variables such as attachment style, trait anxiety, and extraversion may affect international students' ability to make friends, thereby influencing sociocultural and psychological adaptation. Additionally, host country cultural norms, language barriers, and friendship patterns can hinder relationship building and social support network development, increasing loneliness. Asian international students face particular difficulties befriending locals, as Asian cultures are typically collectivist while Western cultures emphasize individualism, assertiveness, and independence rather than interdependence. Empirical research by Yan and Berliner (2010) found that due to cultural differences, Chinese students in the United States struggled to establish friendships with American peers, with reduced social support networks leading to anxiety and frustration. Pedersen et al. (2011) conducted 200 intensive interviews with international students in Australia and found that two-thirds experienced loneliness or isolation,

particularly during the initial months. The authors noted that international students' loneliness stems from personal loneliness due to separation from family, social loneliness from losing interpersonal networks, and cultural loneliness from the absence of preferred cultural and linguistic environments. Ding (2016) used 2013 survey and interview data to examine international students' experiences in Shanghai, finding that they were unaccustomed to and dissatisfied with Chinese teaching methods, with inadequate social support services being a major source of dissatisfaction.

3.3 Perceived Discrimination

Experiencing social discrimination constitutes another psychological cost. Smith and Khawaja's (2011) review noted that compared to domestic or European students, those from Asia, Africa, India, Latin America, and the Middle East often report experiencing overt discrimination ranging from feelings of ethnic inferiority to direct verbal insults, employment discrimination, and physical attacks (having objects thrown at them). Both subtle and overt discrimination negatively impact acculturation, potentially worsening depression and increasing homesickness. Poyrazli and Lopez (2007) surveyed 439 university students (198 international and 241 American) across two campuses, providing empirical evidence that international students experienced significantly higher discrimination levels than domestic students.

3.4 Acculturation Stress

Wen et al. (2018) used census data and international student experience surveys to identify major challenges facing international students in China, finding that the primary difficulty was adapting to Chinese society and culture. Students struggled particularly with adapting to Chinese "culture and values," followed by environmental adaptation. They encountered language barriers, unfamiliar food and housing, and isolation in international student dormitories that limited effective understanding of Chinese society.

3.5 Academic Stress

Smith and Khawaja (2011) identified academic stress as a major acculturative stressor. While all university students face academic pressure, international students' stress is often exacerbated by anxiety about foreign language instruction. Second, international students may experience increased stress when their overseas academic performance fails to meet expectations, as they may anticipate performing better than or at least equal to their domestic performance. However, due to language issues and the need to adapt to new educational, cultural, and social environments, their grades may not meet expectations, reducing confidence in adapting to the new environment. Third, international students may face pressure from family or sponsoring institutions to complete courses with high quality, increasing personal adaptation stress. Fourth, students may perceive the quality and efficiency of services provided by foreign

universities as failing to meet their expectations, and this gap between expectations and reality correlates positively with poorer academic adaptation and increased depression. Finally, international students may find new teaching methods difficult to adapt to; for example, Asian students may struggle with interactive Western classrooms and critical thinking approaches.

3.6 Reverse Culture Shock

Scholars note that individuals returning after extended overseas stays experience varying degrees of reverse culture shock. Kranz and Goedderz (2020) studied 510 participants aged 16-29 who had spent 6-60 months abroad primarily for educational purposes. Drawing on Erikson's identity model, they identified three processes of home-culture identity formation: commitment, in-depth exploration, and reconsideration of commitment. Data analysis revealed that at the variable-centered level, reentry problem severity (reverse culture shock) negatively correlated with commitment to home culture but positively correlated with exploration and significantly positively correlated with reconsideration. This pattern was confirmed in person-centered analyses, with individuals in moratorium status (low commitment, high exploration, high reconsideration) reporting more reentry problems, while those in closure status (the opposite pattern) reported the fewest problems. Thus, while individuals experience reverse culture shock after studying abroad, the severity of reentry problems varies. For sojourners, forming a multicultural identity is both challenging and opportunistic: although reconsidering commitment to home culture relates to cross-cultural readjustment difficulties, it also correlates with more open experiences that facilitate adaptation to different cultures.

4. Mechanisms

4.1 Cognitive Factors

Yarosh et al. (2018) conducted 42 semi-structured interviews with students, graduates, scholars, and administrators from Erasmus Mundus Joint Master Degrees programs. Using thematic analysis, they proposed cognitive components of intercultural competence (IC), finding that IC elements are constructed from building blocks (knowledge, awareness, skills, and attitudes—KASA components) and emerging components: supporting capacities (intercultural critical reflection and intercultural emotional intelligence) and metacapacity (for developing IC). However, whether these cognitive factors directly mediate the relationship between study abroad and cross-cultural competence remains to be examined.

4.2.1 Cultural Intelligence

Holtbrügge and Engelhard (2016) examined the mediating role of cultural boundary spanning (CBS) in the relationship between individual motivation and cultural intelligence (CQ). Grounded in self-determination theory, they

surveyed 901 university students from 46 countries. Results showed that CBS positively affected all four CQ dimensions, with structural equation modeling revealing that intrinsic motivation and highly self-determined extrinsic motivation were positively associated with CBS, and that these motivations influenced CQ through CBS as a mediator.

4.2.2 Social Support

Zimmermann and Neyer (2013) found that the transnational social support established by students abroad largely explained increases in personality openness and decreases in neuroticism. For increased openness, the cultural learning framework suggests that cross-cultural relationship experiences provide first-hand exposure to cultural differences, facilitating behavioral changes. This corresponds to the sociogenomic model, wherein such social experiences lead to non-specific behavioral changes that bottom-up promote trait-level changes—increased openness. For reduced neuroticism, earlier research indicates that successfully managing acculturative stress may reduce trait anxiety, and multiple studies show that navigating multicultural social contact is a major challenge of international sojourn. Thus, establishing good social relations and successfully integrating with the local community can be considered an important step in overcoming acculturative challenges, thereby reducing individual stress and anxiety that ultimately translates into decreased neuroticism.

4.2.3 Cultural Identity

Maeder-Qian (2017) identified several explanations for enhanced Chinese cultural identity among overseas Chinese students. First, older Chinese students more often described themselves as marginalized observers rather than active participants in local communities. Second, China's rapid economic development and rich cultural heritage have strengthened students' identification with Chinese culture and confidence in linking their future with their homeland. Third, Chinese students comprise the largest international student group on German campuses, making it easy to connect with compatriots and use their native language to strengthen ties to their ethnic culture. These potential pathways require theoretical frameworks and concrete hypotheses to provide direct empirical support.

5. Contributions, Limitations, and Future Directions

5.1 Contributions and Implications

Examining how study abroad influences psychology and behavior from a cultural psychology perspective holds significant theoretical and applied value. First, with the recent surge in studying abroad, the psychological and behavioral changes resulting from these experiences have become widely discussed topics. Second, study abroad is a double-edged sword with both benefits and costs; researchers must better understand its positive and negative effects and

their underlying mechanisms, which this paper seeks to review and explore. Third, theoretical findings on study abroad' s psychological and behavioral impacts need better translation to practice, such as psychological assistance for students, returnee adaptation, and employment. From a cultural psychology perspective, this paper synthesizes existing domestic and international research, summarizing the psychological benefits and costs of study abroad and potential mechanisms. We also identify contributions, limitations, and future research questions.

In summary, study abroad' s impact on individual psychology and behavior is complex, dynamic, and multi-pathway. The revealed psychological and behavioral effects, underlying mechanisms, and boundary conditions provide theoretical frameworks, accumulate empirical findings, and raise important questions for future exploration, laying foundations for a logically coherent theoretical framework and clear conclusions. Research shows that study abroad brings benefits including enhanced cross-cultural competence, increased personality openness, and improved self-efficacy, but also costs such as anxiety and depression, reduced social support, and acculturative stress. Thus, study abroad presents both opportunities and challenges; if individuals can overcome difficulties and fully utilize their overseas experiences, these experiences will greatly benefit their future development. Previous scholars have explored how study abroad influences psychological and behavioral changes from cognitive and behavioral perspectives, and future research should uncover deeper psychological mechanisms.

5.2 Limitations and Future Directions

Current research has several limitations. First, studies on study abroad' s psychological and behavioral impacts are relatively scarce, mostly examining surface-level effects and group differences while lacking investigation of deep psychological changes. Second, research on mediating and moderating mechanisms is extremely limited, hindering construction of mid-range theories that clearly describe and explain the psychological consequences and internal mechanisms of study abroad. Third, existing research relies on qualitative methods like interviews and observations or correlational evidence from questionnaires, lacking integration of multiple methods for cross-validation. Findings are not robust, and future research should employ more quantitative methods to verify and extend existing results. Finally, future studies should further explore applied value—whether study abroad' s psychological and behavioral impacts can be used to enhance cross-cultural competence, employment competitiveness, mental health, and well-being while reducing acculturative stress, anxiety, depression, prejudice, and discrimination. These issues require deepening and expansion in subsequent research.

In conclusion, future research should further reveal the psychological and behavioral impacts of study abroad and their mechanisms, thereby minimizing negative psychological shocks and high psychological costs while maximizing

benefits. This will provide scientific guidance and policy recommendations for study abroad policy formulation, international student counseling, and higher education culture.

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Note: Figure translations are in progress. See original paper for figures.

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