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Navigating mental health needs of US students studying abroad: An appraisal and coping approach from program leaders perspective

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Abstract

This study focuses on navigating US college students' mental health challenges in a semester-long study abroad from program leaders' perspectives. Student challenges range from homesickness to depression, undiagnosed needs, anxiety, suicidal ideation, substance abuse, personality disorders, eating problems, and insomnia. The researchers deployed a qualitative multiple-case study across five universities. Interviews with program leaders afforded an examination of multiple variables and circumstances. The researchers interpreted the data using NVivo software. The appraisal and coping process model established in this study provided an understanding of how program leaders developed different coping strategies and measures when facing students' mental health challenges. The data also produced five prescribed themes that could assist future program leaders in navigating said challenges. This research contributes to two post-COVID trends: (1) the acknowledgement of and growth in undergraduate students' mental health needs and (2) student participation growth in faculty-led study abroad programs.

Abstract in Chinese

本研究旨在从项目负责人的视角出发，探讨美国大学生在为期一学期的海外游学项目中面临的心理健康挑战及其应对之道。学生面临的挑战涵盖了从思

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乡病到抑郁症、未确诊的特殊需求、焦虑、自杀意念、药物滥用、人格障碍、进食障碍以及失眠等一系列问题。研究人员采用定性多案例研究法，对五所高校进行了调研。通过访谈项目负责人，研究人员得以深入审视多个变量及具体情境。研究人员利用 NVivo 软件对所收集的数据进行了解读。本研究构建的 “评估与应对过程模型” 有助于人们理解：当面对学生的心理健康挑战时，项目负责人是如何制定并实施各类应对策略与措施的。此外，数据分析还归纳出了五个核心主题，这些主题可为未来的项目负责人应对上述挑战提供切实指导。本研究对后疫情时代的两个发展趋势具有重要贡献：(1) 本科生心理健康需求的日益凸显及其受重视程度的提升； (2) 学生参与由教职人员带队的海外游学项目的人数呈增长态势。

Keywords

Cultural shock; faculty-led; mental health; study abroad; virtual therapy

1. Introduction

Navigating a potential mental health illness while studying abroad can be a daunting challenge for students, parents, and program leaders, and this topic is becoming more and more pressing. There has been growth in US college students' mental health needs, which may be the result of overall growing awareness (Bath and Kim, 2016; Barr et al., 2020) and study abroad programs adapting to these trends (Neihaus et al., 2020; Lei et al., 2023). Meanwhile, trends in US college study abroad program participation have changed from growing (from 1990 to 2018) (Dietrich, 2018; Ogden & Brewer, 2023) to declining in the face of COVID (Mok et al., 2021), global volatility, and geopolitics (Pedersen et al., 2021; Pundir, 2022; Redden, 2021). However, a return to study abroad participation may be underway.

Coping with the stigma surrounding mental health needs is challenging from two perspectives concerning studying abroad for a semester. First, there is a personal adjustment journey for the student, in addition to potential separation anxiety and homesickness (Poyrazli & Mitchell 2020). A significant change in environment (culturally different from the US) can trigger loneliness or depression (Quigley et al., 2015). Given this, the phases of cultural shock, acculturation (the process by which a culture adopts the customs and ideas of another culture), and cross-cultural sojourner adjustment[1] (Pedersen et al.,

[1] The term "sojourner adjustment" refers to individuals moving to foreign destinations for a temporary period; they may move on or return to their original culture (Ward et al., 2001).

2011) may be covered in study abroad orientation, but discussions of additional mental health symptoms are not as frequent. Program leaders are challenged to differentiate when student behavioral symptoms denote something outside normal cultural adjustment. Delineating what may be a "symptom" from a "phase of acculturation" versus a "mental health need" is difficult for a faculty program leader and may be even more challenging for a student. Second, the destination country's culture may perceive mental health issues differently than the US or have adverse general perceptions of America and Americans. Initially, a US student may experience cultural bias and prejudice toward the US (in the form of anti-Americanism; McCabe, 2005). In addition, different cultures may attribute the historical origin of mental health issues to demons, divine intervention, family conflicts, supernatural forces, or predestined suffering (Choudhry et al., 2016), which leads to different perceptions of mental health needs. The lack of mental health services around the globe, for example, is a significant behavioral need from a US perspective (Chen & Mak, 2008).

There is a need to explore different coping strategies for program leaders when facing students' mental health challenges—both underreacting and overreacting should be avoided. It is foreseeable that mindfulness of cultural shock may play an important role in shaping program leaders' appraisal of mental health situations, which further affects their choice of coping strategies. In addition, program leaders facing the post-COVID return of study abroad desire best practices for program design; therefore, our research questions were positioned as follows: (1) How should program leaders navigate the mental health needs of US students while studying abroad,[2] particularly concerning the complication of expected cultural adaptation challenges? (2) What are the best practices for program design while leading US students studying abroad?

The present qualitative case study reviewed the current literature and gathered data from experienced program leaders in the field. The qualitative methodology allowed the researchers to ask participants follow-up questions surrounding program processes and measures to support students with mental health needs (interview questionnaire appended). The researchers analyzed the data through the lens of Lazarus and Folkman's (1984) transactional model of stress and coping. The study's findings and implications outline specific training needs for program leaders. Best practices and suggestions from participants (expert study abroad program leaders) are also summarized. The best practices

[2] Researchers define "studying abroad" as attending a foreign university for a semester (three to four months, minimum).

range from applying specific program design and orientation formats to facilitating cultural adaptation and utilizing new forms of virtual therapy.

2. Literature review

The literature on mental health needs in the context of studying abroad has been in flux because of campus mental health awareness growth (Akiba et al., 2024; CGS & JED, 2021; Holm-Hadulla & Koutsoukou- Argyraki, 2015; Prince, 2015) and a tentative post-COVID rebound in study abroad participation (Baer & Martel, 2023). The post-COVID rebound for US students studying abroad began in 2022 and was driven by faculty-led program growth; 55% of the programs were faculty-led (Baer & Martel 2023).

COVID-19 heightened mental health awareness across US universities; 88% of college counseling centers have since experienced an increase in treatment services (Lipson et al., 2019). In contrast, awareness of the mental health needs of US students studying abroad has received comparatively less attention. As the return to international education participation increases, there is a need for mental health support (Mason & Ingraham, 2023). Some of the most common disorders experienced by study abroad students involve depression, borderline personality disorder, hyperactivity disorder, psychotic symptoms, anxiety and anorexia (Lindsey & Strove, 2008; Lucas, 2009).

Complex study abroad student screening processes are conducted by study abroad administrators and faculty program leaders. Leaders must navigate the legal requirements of the Family Education Rights and Privacy Act (FERPA), the Health Insurance Portability and Accountability Act (HIPAA) (Neihaus et al., 2022), and the American Disability Act (ADA)[3]. Most universities require health screening before US students can go abroad. This may involve a review of medical information that the student has shared, as well as the destination country's vaccination requirements. Students may disclose a mental health and medication record, although some may not due to fear of application rejection (Neihaus et al., 2022; Lindeman, 2016). One study found only 55% of students with pre-existing mental health conditions disclose this information (Bathke & Kim, 2016). Some universities conduct the application process first, free of any medical information; then, after acceptance, there is a student health check follow-up.

[3] Importantly, ADA accommodation must be disclosed and acknowledged by the student.

Study abroad program-leading faculty often struggle with under preparedness and being held accountable for guiding students with mental health support needs (Niehaus et al., 2022; Hoffswell, 2022). According to a study by Neihaus et al. (2022), 35% of study abroad faculty leaders felt that they should not be held accountable for student mental health needs, especially without additional support. One researcher (Neihaus et al., 2022), for example, had to learn how to deploy a suicide assessment questionnaire while leading American students in China. Ultimately, many universities are not prepared for or knowledgeable about how to navigate mental health services in another country. Study abroad leaders are often untrained and unpracticed (Quigley et al., 2015); however, some universities use third-party vendors with local therapy resources through health organization networks such as SOS International, Mental Health First Aid, QPR Institute (suicide prevention training), Mobility International USA (MIUSA), Mindhamok, and/or CISI Insurance (Ingraham & Mason, 2023).

Access to local mental health care is likely to be limited in most study abroad countries as well as challenging due to language and cultural differences (McCabe, 2005; Poyrazli & Mitchell, 2020), which can make determining a mental health diagnosis difficult. It is worth noting that the practice of virtual therapy or teletherapy has grown during and after COVID to assist with mental health needs (Waite et al., 2022). Virtual services could help when local therapists might not be available or are otherwise overloaded (Ingraham & Mason, 2023). Indeed, the practice of teletherapy applications has been successful in both virtual synchronous and asynchronous formats (Hills & Hills, 2019). For example, the University of Arkansas offers mental health resources available to study abroad students through virtual appointments (Strombom, 2023). Historically there were legal barriers requiring the counselor's state license to match the client's state of residency; however, recent "Counseling Compact" policy allows Licensed Mental Health Counsellors (LMHCs) from other member states (equitably qualified) to offer remote therapy (James et al., 2022).

Most US universities encourage the disclosure of mental health needs in their study abroad program application and orientation processes. This allows study abroad leaders to plan accommodations for students' mental health conditions, making mental health conditions manageable and treatable while studying abroad (Prince et al., 2006); however, two more difficult situations may arise once a student is abroad. First, a previously undiagnosed or undisclosed mental health condition may surface. Program leaders have experienced cases

when a student or parent *thought* a mental health condition was under control or improving; however, without disclosure, safety preparations would not be in place (McCabe, 2005). Second, students may think they are safe to go off their medications. A "honeymoon phase" may have made them feel they could go off of their medications safely during their study abroad program (McCabe, 2005).

These two difficult situations could be further complicated by the culture shock that students experience in semester-long study abroad programs. Initially, "culture shock" was identified when someone exhibited the characteristics of depression due to cultural loss combined with anxiety regarding how to live in a new cultural context (Oberg, 2006): individual confusion, loss of control, and/or loss of emotions when moving from a familiar culture to an unfamiliar one. Today, there are over 40 books titled *Culture Shock,* and most scholarship cites four to six stages necessary for cultural adaptation (Furnham, 2019). This contemporary "cultural learning theory" emerged from original "cultural shock" literature and comprises two dimensions, one involving sociocultural adjustment and the other involving psychological adaptation (Masgoret & Ward, 2006). Sociocultural adjustment focuses on the behavioral characteristics of acculturation, while psychological adaptation reflects emotional and psychological characteristics of health (Wilson et al., 2013).

Interestingly, recent studies have indicated the mental impact of cultural shock is shifting—and potentially lessoning—with advancements in technology (Pacheco, 2020). Students studying abroad can quickly access media apps to facilitate their cultural learning and adaptation. They have access to local social media, blogging, YouTube, GPS navigation, weather apps, TripAdvisor, translation apps, and Facetime or WhatsApp to communicate locally or to home. Such social media tools may offer an adaptive "buffering effect" according to Forbush and Foucault-Welles (2016). Further, Adler (1975) noted that while "culture shock" is often associated with negative consequences, it is also characteristic of self-development, personal growth, and cultural learning: fundamental reasons why program leaders promote study abroad. Regardless, it is difficult for a program leader to delineate when a student's cognitive dissonance, disassociation, or helplessness exceeds the tipping point of cultural shock and becomes a mental health disorder.

In sum, there is substantial literature on cross-cultural stressors and acculturation issues that US students face when studying abroad; however, there are few studies on dealing with the complications of culture shock mixed

with mental health conditions. There is also a lack of studies concerning coping strategies and measures of mental health challenges from program leaders' perspectives when faculty-led study abroad programs are on the rise. Finally, in a time of widely accessible social media and virtual learning, there is a lack of literature systematically synthesizing best practices for study abroad programs.

3. Theoretical lens

Lazarus and Folkman's (1984) transactional model of stress and coping proposes that the objective appraisal of a situation helps promote better coping measures to alleviate stress levels. Humans process two types of appraisals unconsciously. *Primary* appraisal involves the cognitive evaluation of what is at risk in a situation. The situation (or emerging event) is likely to fall into one of three categories: irrelevant, benign-positive, or stressful. Fadel and Brown (2010) further developed three evaluation subcategories for the stressful category: harm (situation has resulted in some damage or loss to the person); (2) threat (situation involving harm/loss that has not yet taken place but is anticipated); and challenge (situation is regarded as an opportunity for gain or growth). *Secondary* appraisal involves answering the general question of whether the resources at hand can manage the situation. It entails the evaluation of situation controllability based on the resources at hand. There are four subcategories involved in secondary appraisal (Fadel & Brown, 2010): amenable (the action entity can change the situation or do something about the situation in a positive way); manageable (the action entity has to accept or get used to the situation); unmanageable (the action entity has to hold back from doing what is wanted); and undecided (the action entity needs to know more before acting). In general, there are two types of strategies that can be used to deal with stress (Fadel & Brown, 2010): problem-based strategies that include information gathering, delegation, or confrontation; and emotion-based strategies that include taking ownership or seeking moral and emotional support. Although the original appraisal and coping theory is mostly used to deal with focal subjects' own situations—firsthand emotions based on how focal subjects interpret their own situations—Wondra and Ellsworth (2015) suggested applying this theory to the people around focal subjects because empathy theory states people surrounding focal subjects are able to interpret others' situations (as focal subjects do for themselves).

The main purpose of the present study is to investigate how program leaders navigate and cope with US students' mental health challenges while

studying abroad for a semester. Lazarus and Folkman's (1984) transactional model fit this study because the process model helped the researchers better understand how program leaders determined different coping measures when facing different symptoms of mental health challenges presented by students. In addition, the study's unique research context prominently utilized three aspects of the transactional model. First, the research focused on the stressful category of primary appraisal results. Second, participating program leaders' coping strategies generally fell into the problem-based category because they were not directly subjected to stress, even though they might experience it vicariously. Third, the programmatic nature of study abroad afforded identification of the role of cultural shock mindfulness in program leaders' appraisal processes.

4. Methodology

The researchers deployed a multiple-case study across five study abroad programs. This method allowed examination of multiple variables and different circumstances (Yin, 2003). Specifically, the researchers implemented "stratified purposive sampling" (Patton, 2002) through a collegiate network of university study abroad offices. After networking with US program leaders, the researchers selected a group of five highly experienced program leaders. The combined breadth of their experience in study abroad comprised over 100 years across 6 continents. The programs included large public universities (student headcount 25,000), small private colleges (student headcount 3,000), and a global study abroad organization for US college students. In addition, the study researchers themselves have extensive study abroad experience as students, scholars, and program leaders of long-term semester and short-term (one month) programs in multilingual environments. One researcher has navigated multiple student mental health dilemmas abroad and is an ambassador for the US State Department Critical Language Scholarship program.

The researchers used a semi-structured interview process with opportunities for interviewees to expand on their answers or to specify details in their responses. This method also permitted the interviewers to ask follow-up questions. The semi-structured interviews facilitated exploration and contextual descriptions that were meaningful to participants (Gill et al., 2008). All prospective interviewees acknowledged their permission to participate in the study, and the researchers assigned pseudonyms to the participants for confidentiality. The researchers conducted interviews in person or virtually in

2023 then digitally recorded, transcribed, and reviewed the transcripts for research data accuracy. Interviews ranged from approximately 45 to 60 minutes and comprised semi-structured questions. Researchers developed the interview questions after completing the literature review and formulating the research questions. The interview question format assumed characteristics of cultural shock were innate to student cultural adaptation; specific interview questions can be found in the Appendix. The researchers utilized *NVivo* software to identify and code interview themes and patterns. Each researcher, first, interpreted and coded the transcript data separately, then data was calibrated to ensure accuracy and quality. All themes were captured and coded to the point of redundancy or overlap to exhaust all gathered data. Although saturation was not used as a stopping criterion for data collection, thorough data analysis indicated that no new themes emerged from the five interview transcripts (Saunders et al., 2018).

The researchers completed two types of coding in the present study. The first comprised coding based on themes. The researchers read all interview transcripts and broadly coded the data into themes. The second category comprised coding based on relationships among themes. The researchers based relationship coding on completed scenarios in all transcripts, which means that there were simultaneous mentions of mental health challenge symptoms and coping measures taken by program leaders that corresponded to symptoms in the same scenario. The scope of relationship coding was narrower than that of theme coding because not every theme code presented in a complete scenario or case.

The researchers generated coding theme categories from Lazarus and Folkman's (1984) transactional model of stress and coping. These theme categories—situations, primary appraisal, secondary appraisal, and coping strategies—are represented as rectangles in Figure (1). The researchers coded all mental health challenge symptoms, from homesickness to suicide attempts, as unique themes under the category of situations, represented by oval shapes in the first rectangle to the left in Figure (1). The researchers further categorized primary appraisal results using Fadel and Brown's (2010) framework. These results—challenge, threat, and harm—are represented by three oval shapes in the second from the left rectangle of Figure (1).

The researchers linked minor symptoms, such as homesickness, frustration/mood swings, and dysfunctional behavior, etc., with the *challenge* subcategory. Most experienced program leaders deemed these minor challenge

symptoms as normal responses to studying broad and identified them as opportunities for student growth. The researchers assigned anxiety and depression as moderate symptoms, usually related to preexisting conditions, and linked them to the *threat* subcategory under primary appraisal in Figure (1). In worst-case scenarios, self-harm or suicide attempts surfaced as notably dangerous behaviors. The researchers linked these behaviors to the *harm* subcategory under primary appraisal. These three links are represented by the three dotted lines between the first and second rectangles from the left in Figure (1).

The researchers found that coping strategies were highly related to secondary appraisal results. Corresponding to the four secondary appraisal results—amenable, manageable, unmanageable, and undecided (Fadel & Brown 2010)—the researchers generated four general coping sub-strategies, respectively:

1. Proactive strategy, such as "build an inclusive community on site" or "on-site orientation and periodic check-in",
2. Reactive strategy–acknowledge, such as "reminder to stay on medication or therapy" or "see a mental health counselor",
3. Reactive strategy–deflect, such as "reach out to parents" or "send students home"; and
4. Engage communication strategy, such as "have a talk".

Each coping sub-strategy is represented by an oval shape in the fourth rectangle from the left in Figure (1). The researchers coded all the coping measures mentioned by interviewees (such as "build an inclusive community on-site") into these four categories of sub-strategies.

The researchers did not code secondary appraisal results because they found an adopted coping strategy fully reflected a program leader's secondary appraisal result; in other words, there was a one-to-one relationship between the two conceptual groups. For example, responding to the secondary appraisal result "manageable," a program leader believed they had to accept or otherwise get used to students' mental health challenges, which naturally led them to a reactive strategy–acknowledge sub-strategy result. This is also why the third rectangle from the left in Figure (1), secondary appraisal, is placed above the main line of the process model and linked to the primary appraisal and coping strategies rectangles by dotted lines (to represent conceptual links).

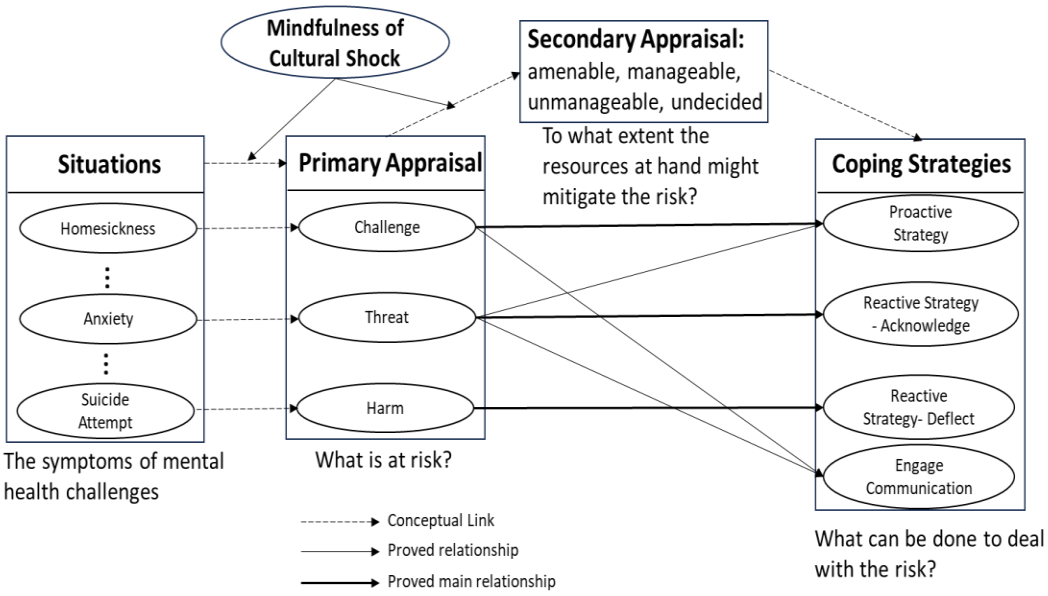
In Lazarus and Folkman's (1984) process model of stress and coping, conceptually, primary appraisal leads to secondary appraisal, which in turn

leads to coping strategies and measures. Operationally, the researchers coded the relationships between primary appraisal results and coping strategies. For example, for a specific scenario mentioned by an interviewee, the researchers first linked the mental health challenge symptoms mentioned to one of the primary appraisal results (challenge, threat, or harm) and then categorized the coping strategies mentioned by the interviewee into one of the four coping sub-strategies (proactive strategy, reactive strategy–acknowledge, reactive strategy–deflect, or engage communication strategy). Thus, the researchers documented extant relationships between a linked appraisal result and a coded coping strategy.

5. Findings and implications

After coding all scenarios, the researchers identified nine relationships in total, as shown in Figure (1). First, it is not surprising that the proactive strategy corresponded to the primary appraisal result "challenge" (two times), the reactive strategy–acknowledge corresponded to the primary appraisal result "threat" (three times), and the reactive strategy–deflect corresponded to the primary appraisal result "harm" (once). These results represent the main relationships found between primary appraisal results and coping strategies (Finding A), as represented by bold lines in Figure (1).

FIGURE (1)
CODING RESULTS OF THE PROPOSED APPRAISAL & COPING PROCESS MODEL FOR STUDY ABROAD



Second, the researchers found that proactive strategy was complementarily associated with "threat" appraisal results (Finding B). In revisiting the case, the researchers discovered that participants employed both reactive strategy–acknowledge and proactive strategy. For example, a student had a pre-existing condition and openly told the program leader that he was in therapy. The program leader did two things: (1) urged the counseling center to provide more flexible drop-in hours to the student (a reactive strategy–acknowledge) and (2) implemented periodic check-ins with the student (a proactive strategy).

Third, the engage communication coping sub-strategy was associated with both "challenge" and "threat" appraisal results (as an auxiliary strategy; Finding C). The researchers coded these two relationships in one scenario, as represented by the solid lines in Figure (1). In that scenario, the student initially presented minor symptoms of mental health challenges, such as "hostile relationship with the host family," "not fitting in with peers," "poor academic performance," and "dysfunctional behaviors (over consumption of alcohol)"; therefore, researchers assigned an initial appraisal result of "challenge". The program leader confronted the student and discovered that the situation was more serious than initially appeared because the student had thoughts of self-harm; therefore, the researchers changed the primary appraisal result to "threat". The program leaders implemented a final solution of conducting separate dialogues: with the student alone, with the host family alone, and with the student and the host family together.

Although specific coping measures varied depending on unique situational variables, a main coping strategy corresponded to each primary appraisal result; therefore, offering training to improve program leaders' primary appraisal abilities—pertaining to various symptoms of students' mental health challenges—will improve the likelihood of their choosing more effective coping strategies (Implication A). In addition, regarding a threat appraisal result, program leaders should (1) acknowledge students' mental health challenges by urging them to stay on therapy and (2) practice proactive measures, such as periodic check-in with students (Implication B). Of note, the engaging communication sub-strategy, as a fourth strategy, fit both the "challenge" and "threat" appraisal results; therefore, program leaders need to accurately appraise and resolve the conflicts underlying students' mental health challenges through effective communication (Implication C).

Fourth, the researchers observed that mindfulness of cultural shock (represented by the oval above the main line in Figure (1) moderated program leaders' appraisal results. These moderation effects are represented by the two solid lines that originate from the mindfulness of cultural shock oval and extend toward the two dotted lines ending at the two appraisal process rectangles in Figure (1). More specifically, when facing the same situation, different program leaders were found to have different appraisal results with or without cultural shock in mind, which led to different coping strategies and measures (Finding D). For example, one of the interviewees mentioned a specific scenario concerning students' disgust or anxiety about eating fish in Italy. Researchers offer the following two interpretations of this scenario.

First, without cultural shock in mind, the primary appraisal is "threat", the secondary appraisal is "manageable", and the coping strategy is reactive strategy–acknowledge. Given the cultural differences in eating practices, the specific measure would be to change the menu for American students, as demonstrated in the following interview statement by Program Leader I:

> And what the school has done is basically take the Italian culture and transform it into what would be appropriate for an American Midwest palate anytime we're doing any group dinners. So, when we go to Venice, the school traditionally offers, like, a fried chicken and a side salad with pasta made with butter as an option in Venice.

Second, with cultural shock in mind, the primary appraisal is "challenge", the secondary appraisal is amenable, and the coping strategy is proactive strategy–recognize. With the goal of stretching students' capacities and teaching them, specific measures would be to give fish to students and to offer encouragement, as related in the following statement from Program Leader I:

> If, however, you have just thought that fish is disgusting because you have never eaten fish in your life or you think it's that stinky stuff that your cousins used to make and you want to vomit, [then] this is your opportunity to become an Instagram star, because you are going to be trying something new, and what's the worst that can happen to you? You might not like it, and you will have wasted some money, and you will go out after dinner, and you will have pizza, [and] your life will move on, but you will say to people look at the gross thing that my teacher just asked me to try.

> Then comes the Black Squid ink pasta with cuttlefish chunks. And I have had students actually faint at the table because they have never seen dishes like that. And then they all—I'd say because it's me and because I develop [in] a way with them, the ones that do not have a serious life or death related issue identity wise or . . . health-wise with it—do take the challenge, and they all *Instagram*, social media, or *TikTok* it. They do not always finish it, but they at least try it, and that's something I feel like when you hear them afterward.
>
> And they start out by complaining, and then they're kind of, like, 'Oh, what my teacher made me do,' but then you realize that's the highlight of their trip.

Finally, it is difficult to differentiate between *preexisting conditions* and *cultural shock* as sources of mental health challenges; however, time often reveals this difference. When the compounded symptoms of mental health challenges lasted longer than expected, program leaders adjusted their appraisals, and the adopted coping strategies and measures changed (Finding E). For example, one of the interviewees mentioned that when the diagnosis of mental health challenge sources changed from cultural shock to preexisting conditions, their primary appraisal changed from "challenge" to "threat", and their coping strategy changed from a proactive strategy ("build an inclusive community on site") to a reactive strategy–acknowledge ("see a mental health counselor"), as illustrated in the following example:

Cultural shock can be the source of mental health challenges, as suggested in the following interviewee narrative:

> The initial signs that were noticed were poor response to culture shock, increasing withdrawal from program activities, frequent frustration and mood swings, not fitting in with peers, and poor academic performance. . .. [T]hat's a really common example for students who have mental health [challenges], anxiety, and depression. No medication was taken or currently seeing a counselor. So, [we] stepped in; we initially thought, like, it was just culture shock. . .. And we worked on building kind of [an] inclusive community onsite, just helping the group to normalize mental health care strategies like self-care and meditation, journaling, [etc.]. — Program Leader II

Preexisting conditions can also be the source of mental health challenges, as seen in the following statement by Program Leader II:

> But once we saw that she was having compounded symptoms and [that] it was lasting longer than expected, then we realized, okay, well, maybe something else was going on. Then, [after] prodding with her, she disclosed, 'Oh, yeah. And a year ago, I did have depression when I was struggling with X, Y, and Z'. We can also look for—we did connect with the counselor back home, as well as with a local resource, which I do not think she saw. — Program Leader II

In summary, it is important for study abroad program leaders to be mindful of cultural shock symptoms in students studying abroad. Offering training to improve program leaders' mindfulness of cultural shock will improve their capabilities in choosing coping strategies by changing their appraisal results to meet students' veritable mental health needs (Implication D). In addition, program leaders should pay attention to other potential sources of mental health challenges, such as preexisting conditions. Although the symptoms of cultural shock and preexisting conditions may intertwine, noting symptom frequency and duration is key to differentiating cultural shock from mental health problems; such differentiation will allow program leaders to choose appropriate coping strategies (Implication E). The findings and implications of this study are summarized in Table (1).

TABLE (2)
SUMMARY OF FINDINGS AND IMPLICATIONS

Findings	Implications
A. The main coping strategy adopted by program leaders depends on their primary appraisal result regarding students' mental health needs.	A. Offering training to improve program leaders' capabilities for conducting primary appraisal pertaining to various symptoms of students' mental health challenges will improve their capabilities in choosing effective coping strategies.
B. The proactive sub-strategy could be used as a complementary strategy concerning a threat appraisal result.	B. In dealing with a threat appraisal result, besides acknowledging students' mental health challenges by urging them to stay on therapy, proactive measures, such as periodic check-in with students, should be taken to improve students' health and wellness.
C. The engaging communication sub-strategy is an important auxiliary strategy for program leaders dealing with challenge and threat appraisal results.	C. Engaging communication is key for program leaders to accurately appraise and resolve the conflicts underlying students' mental health challenges.

D. Mindfulness of cultural shock has a moderation effect on program leaders' appraisal results of students' mental health needs, which leads to different coping strategies.	D. Offering training to improve program leaders' mindfulness of cultural shock will improve their capabilities for choosing coping strategies by changing their appraisal results regarding students' mental health needs.
E. Different diagnoses—regarding cultural shock and preexisting conditions—lead to program leaders adopting different coping strategies.	E. Offering training to improve program leaders' capabilities in differentiating the sources of students' mental health challenges will improve their capabilities for choosing apropos coping strategies.

6. Synthesis of best practices

In addition to solidifying an appraisal and coping process model for study abroad programs, the following five themes emerged from researchers' engagement with study data. These themes comprise a synthesis of best practices and suggestions (outlined in Table 2) from the expert study abroad program leaders who participated in this study. The themes are informed by common examples of mental health-related needs that manifested while their US students were studying abroad: withdrawal (demonstrating a pattern of isolation beyond normal adaptation phases and homesickness); lack of sleep, overeating, or not eating enough patterns; mood swings, not fitting in with peers, or poor academic performance; potential situational depression (not clinical); a zealous freedom or FOMO (Fear of Missing Out) phase; overdoing going out, drinking to excess, or practicing high risk sexual behaviors; deciding to stop taking medications (thinking that the foreign experience would help their mental status), and consciously admitting to potential self-harm thoughts.

TABLE (2)
BEST PRACTICES AND SUGGESTIONS FOR STUDY ABROAD PROGRAM DESIGN

Study Abroad Program Design	Best Practices & Suggestions
Separate the application process and health services screening.	Separate the processes because the former focuses on students' motivation and the latter focuses on students' mental wellness.
Stratify different orientation and training activities.	Organize three levels of orientations (at pre-departure and two additional levels) and a check-in after-departure.
Facilitate the cultural adaptation process.	Nurture an inclusive community of support and trust. Match students with host families. Maintain a consistent medication regiment for students.

Provide extra support to faculty-led study abroad programs.	Help faculty navigate FERPA and HIPPA. Provide comprehensive support from different departments. Make counseling therapists available.
Leverage the new norm for counseling therapy: virtual counseling.	Subscribe to global counseling services, and use a variety of health support apps.

6.a. Separate the application process and health services screening

The majority of program leaders in the present study shared that they separated the study abroad application process from the health screening process. The students, first, applied for studying abroad; questions gauged students' study abroad motivations, academic sincerity, and personal engagement. Health-related questions at this stage could be interpreted as prohibitive to qualification; however, once a student was accepted into a study abroad program, every institution proceeded with health screening. The students filled out self-assessment health forms and a series of questions about whether they were taking medications. If they were, then program leaders could inquire about the basis of students' needs for the medication because a productive self-divulging health discussion is more likely to occur *after* students' application acceptance.

If there appeared to be potential health challenges for a student, then program leaders could have a conversation with the student, emphasizing their desire for the student to succeed and to feel supported with necessary accommodations. They could encourage further discussion concerning how best to support the student or to ask for acknowledgement from the student's healthcare provider. Program leaders, in this case, would not be looking for healthcare approval; rather, they would be looking for acknowledgement of discussion between doctors and students. In one case represented in the present study, for example, the college counseling center confidentially helped out a student with specific study abroad preparations related to their mental health challenges.

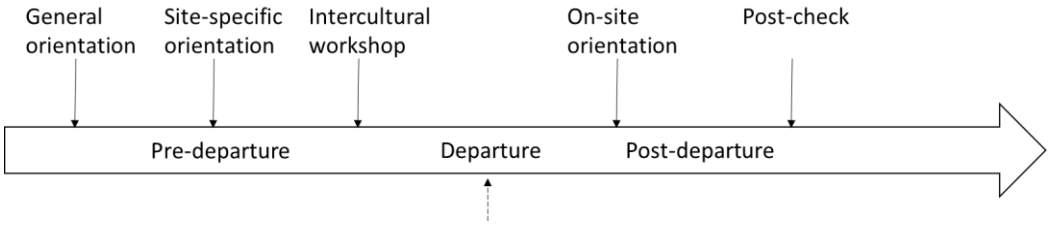
Another university participating in the study had a completely confidential self-disclosure form on which students outlined their general health history, physical learning disabilities, mental health concerns, allergies, medications, etc. Students needed to meet a physician for a health clearance appointment, at which time the physician reviewed their health history form

and filled out a separate health clearance form. The physician judged whether the student would be conditionally cleared or not.

6.b. Stratify different orientation and training activities

Program orientation tended to depend on program type: faculty-led or third-party (i.e., ISEP/International Study Exchange Programs, CIEE/Council of International Educational Exchange, or consortium); however, all program types incorporated orientation processes, and best practices tended to involve three levels of program preparation and orientation. The first level comprised a general orientation for all students studying abroad; the information included was applicable to participants headed to different destinations. The second level comprised a site-specific orientation for students who were going to study within a specific program; therefore, the included information was specific to individual programs. The third level comprised a one-hour-long intercultural workshop that examined cultural differences and adaptation phases; the included information encouraged students with health issues to advise program leaders immediately and underscored staying on medications. Figure (2) presents the recommended timeline for the three levels of orientations and trainings (pre-departure orientation, two additional levels of orientation, and post-departure checks).

FIGURE (2)
TIMELINE FOR ORIENTATIONS AND TRAININGS



During the present study, researchers learned that Florence, Italy, was a locus for many study- abroad programs, with an estimated fifty-plus institutions in the immediate area offering study abroad programs. This critical mass of programs substantiated the need for local psychological counseling services. Some psychologists were US-trained and directly employed by large US universities; however, contractual services were also available. Upon students' arrival, large programs incorporated an hour of on-site orientation in which psychologists reviewed their experiences and services. This service has been

developed recently and, at the time of the present study, was being offered free of cost to students with the goal of increasing their psychological wellness while studying abroad. Researchers further learned that programs in Europe, in fact, tended to incorporate readily available counseling resources; however, this type of resource was not as prevalent among Asian study abroad programs, where access to US-managed hospitals under program insurance (i.e., to SOS providers) may or may not have included resident counselors. Regardless, state departments comprised a resource to which students studying abroad could be referred when searching for local counselors who spoke English.

Another programmatic best practice encompassed a post-check two to three weeks after the students arrived abroad. The students would have had some time to settle in, to get to classes, and to meet roommates. This post-check practice comprised a mental health check-in, including questions such as "how is it going" or "how are you doing?" The excitement or newness of the experience would have been fading, and concerns would have begun to materialize at that time. The post-check period functioned as an appropriate time to proactively address emerging issues.

Finally, it is worth noting that, prior to departure, if a student had a resident therapist, then an inquiry into whether the student could continue counseling virtually would have been explored.

6.c. Facilitate the cultural adaptation process

Present study interviewees indicated a shift away from "culture shock" usage to newer descriptions of "cultural adaptation," "acculturation," and/or "sojourner adjustment." Pre-orientation programs educated study abroad students in these adaptation phases. Regarding adaptation, second-language immersion programs tended to be more challenging, initially, compared to English-speaking programs, until the students gained functional proficiency in the destination country's language. Students in these programs often found themselves tiring earlier at night after intense days of sensory overload.

In cohort programs, orientation best practices comprised nurturing an inclusive community of support and trust, a community that emphasized the practice of keeping communication lines open and that encouraged weekly check-ins with students to ensure that things were going satisfactorily. Such a community watched out for one another and could be mutually sensitive and supportive during the entirety of a program.

In programs with homestays, host families assisted in the assimilation process. Most of the programs had two resident students per home. Experienced homestay programs expertly matched students with host families, which resulted in bonds being formed between students and host families that could last a lifetime.

Further, the present study found that maintaining a consistent medication regimen was critical for students adapting to studying abroad. Program leaders explained to students that they should not go off medications because they were going someplace new. Orientation programs emphasized that existing patterns of anxiety would likely persist while studying abroad. The students who remained disciplined and continued their medication schedules often adjusted within normal timelines. Most of the students referenced in the present study were receptive to this advice and complied with obtaining adequate amounts of medication; however, if controlled substances were used, legal clearance had to be verified in the destination country.

If a student had been in therapy before the study abroad program but would not be during the program, then there should have been a conversation with program directors and on-site (destination country) directors. Program leaders should be empowered to speak with their students, in this regard. On-site program directors should be supported to declare, "You say you are fine, but let us pay for you to talk to a counselor. We will pick up the tab for the first one or two sessions. And then, if you need to continue, we can transition." Program directors in the present study emphasized that they were there to help students and to support them in this way.

6.d. Provide extra support to faculty-led study abroad programs

Faculty are academic scholars and teachers and not usually trained as resident directors; however, taking on the resident director role is unavoidable when faculty choose to lead a study abroad cohort. Often, this role goes beyond an educational service commitment. Faculty program leaders, therefore, might feel unprepared or unqualified to accommodate students with mental health needs (Hoffswell, 2022). Rookie faculty may learn this the hard way, and experienced program faculty do not usually relish the role of foreign residential support—but they can become more effective with training and experience.

The present study revealed that students may act out abroad; embellish foreign freedoms unavailable to them at home; explore big city life; exceed

program codes of conduct; or slide into dysfunctional, dangerous, or depressed behaviors—and the faculty member in charge needs to engage with the students regarding this behavior. Students or peers might say, "I want to tell you something, but I don't feel I can." Faculty, in this case, must juggle the challenges of FERPA (Family Educational Rights and Privacy Act) and HIPAA (Health Insurance Portability and Accountability Act), perhaps replying, "I want to be an ally, but if you tell me something, and I feel that I need to share it with somebody, then I'm legally bound to do just that."

Juggling the guidance of FERPA and HIPPA is daunting. Faculty might wonder if they should escalate a matter to Student Life or engage with a parent. It is often difficult for faculty to determine whether a student's situation is imminently dangerous to their health and, therefore, *must*, legally, be discussed with a parent. The present study suggests that support for faculty from a study abroad office, Student Life, a home academic department, health services, *and* counseling departments is essential.

The study further revealed that study abroad programs with English-speaking licensed resident counseling therapists are an asset to faculty. If no such therapists are available, students may virtually connect with a provider back home. The researchers discovered that the flexibility of counselor drop-in times is ideal for students studying abroad. Faculty without these services were left in a precarious position because most faculty are not trained in how to facilitate a conversation about suicidal ideation, for example, and did not feel it was their role to do so.

6.e. Leverage the new norm for counseling therapy: virtual counseling

In post-COVID times, providing online or virtual counseling services has become the new normal for counseling therapy (Ignacio, 2023). In fact, some studies have shown that once a counselor is technically adept at utilizing and applying multiple virtual tools (i.e., computer, telephone, chat, video, and text features), the process of virtual counseling may be more effective than in-person therapy (Sutoyo et al., 2023). Aligned with these trends, researchers in the present study found that the number of study abroad programs choosing to add insured counseling services to health services is increasing. University study abroad programs can subscribe to global virtual counseling services, such as BetterHelp (of Teledoc Health incorporated). Internet applications have also been developed to deliver online therapy and counseling, so program leaders

and students can explore and access mental health support apps such as *SpeakOut*, *7 Cups, Sibly*, *Youpe*, and *Wysa* (Ma & Xie, 2020). There have even been attempts to use artificial intelligence (AI) to build mental health support platforms (such as *PsySpace* at Pennsylvania State University, a personalized mental health support platform with AI-powered coaching; 2020).

Ultimately, study abroad candidates should be oriented to be accountable for their own mental health and wellbeing. The process of studying abroad is unfamiliar at many levels, and students need to be able to generate resources for themselves in a foreign context. Programs should teach students how to best navigate change, stress, and/or trauma since all comprise life. Studying abroad, in fact, can be a skill builder for coping with health and wellness challenges in post-COVID times.

7. Contributions, limitations, and conclusions

The present study explored program leaders' distinct coping strategies when facing students' diverse mental health challenges in the context of studying abroad. The study's suggested appraisal and coping process model well explains the strategies adopted by participating program leaders. The findings and implications suggest the importance of a proactive and culturally sensitive approach as well as specific training pathways for program leaders. The best practices and suggestions derived from the study provide further guidelines for future program leaders: how to design study abroad programs that better prevent, navigate, and adapt to students' mental health challenges.

There are three potential limitations to this study that should be acknowledged. First, the researchers deployed dual coding to minimize author bias; however, author bias is an inherent risk in qualitative methods (Hammarberg et al., 2016). Ultimately, there were more pros than cons given the researchers' significant study abroad experiences as students and program leaders. Second, the researchers conducted three interviews virtually rather than in-person; greater detail might have been gathered during a physical site visit (Brucks & Levav, 2022). In addition, because of the explorative nature of this study and the constrains of the COVID pandemic, data collection and data analysis were not conducted concurrently to secure theme saturation. Third, researchers assumed that participating program leaders could accurately and unbiasedly assess their study abroad students' states of mind; however, only some program leaders confidently responded they could delineate between a student experiencing culture shock vs. demonstrating mental health needs.

Additional primary data from students might have provided helpful data triangulation for this study.

Ethical approval

Ethical approval for this study was obtained from Whitworth University Institutional Review Board (IRB Proposal ref. 4/2/2023 12:00:00 AM_807_Friends).

Declaration of competing interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Data availability statement

The data that support the findings of this study are not publicly available due to their containing information that could compromise the privacy of research participants.

CRediT author statement

Todd Friends: Literature Review, Methodology, Data Collection, and Data Analysis. **Zuan Sun**: Theory, Data Analysis and Findings

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Use of AI

The authors declare that they did not use any type of generative artificial intelligence for the writing of this manuscript nor for the creation of images, graphics, tables, or their corresponding captions.

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Appendix: Interview Questionnaire

Subject: Navigating/coping with US students' mental health challenges while studying abroad for a semester.

1. What is your experience or role with semester study abroad programs with US students?
2. Do you have a protocol for health screening, and, if so, what does it involve?
3. Do you have a pre-departure orientation program? If so, what does it involve?
4. Can you describe one or two examples of possible mental health challenges while a student was abroad and how they were navigated?
5. Are you able to distinguish an individual's mental health needs or challenges from culture shock symptoms? If so, how?
6. Do you enlist any specific services or processes when a student exhibits potential mental health needs?
7. Do you have any further advice for coping with students' mental health challenges and needs while studying abroad?

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