

# The impact of Chinese traditional culture-themed counseling programs on student mental health outcomes: a study based on Sino-Foreign cooperative universities

Xiaoyu WU

The University of Waikato Joint Institute at Hangzhou City University, Hangzhou 310015, China

**Abstract:** Students in Sino-Foreign cooperative universities (SFCUs) face unique acculturative stressors and identity conflicts due to their cross-cultural educational environment. This study examines the efficacy of an 8-week counseling program integrating Chinese traditional culture (CTC) themes ("Cultural Anchor Program") in improving mental health outcomes. A mixed-methods, quasi-experimental design was employed with 100 students (50 experimental, 50 waitlist-control) from a representative SFCU. Quantitative results showed statistically significant reductions in anxiety (GAD-7,  $p < .001$ ,  $d = 0.85$ ), depression (PHQ-9,  $p < .001$ ,  $d = 0.78$ ), and perceived stress (PSS,  $p < .001$ ,  $d = 0.91$ ) in the experimental group compared to controls, with gains maintained at a 2-month follow-up. Qualitatively, thematic analysis of interviews ( $n=15$ ) revealed three key themes: 1) reframing duality through Yin-Yang, 2) "Wu Wei" as an antidote to academic striving, and 3) cultivating mindfulness through cultural heritage. The findings suggest that CTC-themed counseling is a highly effective, culturally resonant intervention for mitigating the specific psychological challenges faced by SFCU students, providing a valuable model for enhancing mental health support in cross-border educational settings.

**Keywords:** Sino-Foreign cooperative universities; Chinese traditional culture; mental health; acculturative stress; cultural identity; mindfulness; "Wu Wei"

## 1 Introduction

The rapid expansion of Sino-Foreign Cooperative Universities (SFCUs) represents a pivotal development in the internationalization of Chinese higher education. These institutions, such as NYU Shanghai and Xi'an Jiaotong-Liverpool University, create a unique "third space" that blends Eastern and Western pedagogical and cultural norms [1]. While offering a world-class education, this environment also precipitates distinct psychological challenges for students. They often navigate intense acculturative stress, caught between the expectations of their native culture and the demands of an imported Western academic system [2]. This can manifest as cultural identity ambiguity, existential anxiety, and heightened academic pressure, leading to increased vulnerability to anxiety and depression [3].

While SFCUs typically provide counseling services modeled on Western psychological frameworks, a significant gap exists. These models, though evidence-based in their original contexts, may lack cultural congruence for students whose distress is rooted in the very experience of cultural dissonance [4]. This study proposes that Chinese Traditional Culture (CTC)—encompassing Taoist, Buddhist, and Confucian philosophy—offers a rich, untapped reservoir of therapeutic

concepts that can provide a more culturally resonant framework for intervention.

This study aims to design, implement, and evaluate the "Cultural Anchor Program", an 8-week group counseling intervention integrating core CTC principles. It seeks to determine the program's efficacy in improving mental health outcomes and fostering a more integrated cultural identity among students in an SFCU setting.

## **2 Literature review**

### **2.1 The SFCU student and mental health challenges**

SFCU students operate in a context of "maximum acculturation" within their home country. They are simultaneously insiders and outsiders, facing what has been termed "double acculturation pressure" [2]. The pressure to succeed academically in a high-stakes, high-cost environment, often coupled with parental expectations, exacerbates this stress [3]. This complex interplay of factors creates a unique mental health profile that requires tailored interventions.

### **2.2. The limitations of western models and the promise of CTC**

Western cognitive-behavioral and humanistic approaches, while valuable, often emphasize individualism, direct communication, and the modification of irrational thoughts in ways that may not align with more collectivist, indirect, and harmony-oriented cultural backgrounds [5]. This can lead to underutilization of services or less effective outcomes.

CTC philosophies offer alternative pathways to well-being. Taoism's concept of "Wu Wei" (effortless action) can be reframed to help students manage performance anxiety and reduce compulsive striving [6]. The Yin-Yang paradigm provides a framework for accepting and integrating apparent dualities (e.g., East/West, traditional/modern selves) rather than experiencing them as conflict [7]. Chan (Zen) Buddhism's mindfulness practices, rooted in Chinese heritage, offer tools for emotional regulation that may feel more authentic than their secularized Western counterparts [8]. Confucian emphasis on social harmony and relational ethics can help students navigate family pressures and build community.

## **3 Methodology**

### **3.1 Research design**

A sequential explanatory mixed-methods design was employed. A quasi-experimental pre-test/post-test/follow-up design with a waitlist control group was used for quantitative data, followed by semi-structured interviews to explain the quantitative findings.

### **3.2 Participants**

100 undergraduate students (Mean age = 19.7, SD = 1.2; 62% female) were recruited from a large SFCU in Eastern China. Participants were randomly assigned to the experimental (n=50) or waitlist-control (n=50) group. All participants reported elevated levels of perceived stress (PSS > 20) at screening.

### **3.3 Intervention: The "Cultural Anchor Program"**

The experimental group participated in an 8-week, 90-minute weekly group program. Sample modules included:

Week 2: "Wu Wei and Academic Flow"—Applying the concept of non-forcing to study habits and exam preparation.

Week 4: "Yin-Yang and the Balanced Self"—Exploring how their "Chinese" and "international" identities can coexist (complement each other).

Week 6: "Chan Mindfulness for the Anxious Mind"—Practicing breath-focused meditation in a cultural context.

The control group had access to standard university support services.

### **3.4 Measures**

Generalized Anxiety Disorder-7 (GAD-7): Excellent reliability in this sample ( $\alpha = .89$ ) [9].

Patient Health Questionnaire-9 (PHQ-9): Excellent reliability ( $\alpha = .88$ ) [10].

Perceived Stress Scale (PSS-10): Good reliability ( $\alpha = .82$ ) [11].

Cultural Identity Integration Scale (CIIS): A 15-item self-developed scale ( $\alpha = .84$ ) measuring comfort with integrating multiple cultural identities (e.g., "I feel my Chinese heritage is a strength in my international classes").

Semi-structured Interview Protocol: Developed to explore participants' experiences of the program's mechanisms of change.

### 3.5 Data analysis

Quantitative data were analyzed using SPSS 27.0. A series of ANCOVAs were conducted, controlling for pre-test scores, to examine post-test and follow-up differences. Qualitative data were transcribed and analyzed using thematic analysis [1].

## 4 Results

### 4.1 Quantitative findings

ANCOVA results revealed a significant main effect of the intervention on all outcome measures at post-test, controlling for pre-test scores, as the table shows.

GAD-7:  $F(1, 97) = 32.15, p < .001$ . The experimental group showed significantly greater reduction in anxiety (Adj.  $M = 5.2, SE = 0.4$ ) than the control group (Adj.  $M = 8.9, SE = 0.4$ ), with a large effect size (Cohen's  $d = 0.85$ ).

PHQ-9:  $F(1, 97) = 28.43, p < .001$ . The experimental group reported lower depression (Adj.  $M = 5.8, SE = 0.5$ ) than controls (Adj.  $M = 9.1, SE = 0.5$ ),  $d = 0.78$ .

PSS:  $F(1, 97) = 41.09, p < .001$ . The experimental group showed a greater reduction in stress (Adj.  $M = 16.1, SE = 0.6$ ) than controls (Adj.  $M = 21.8, SE = 0.6$ ),  $d = 0.91$ .

CIIS:  $F(1, 97) = 35.22, p < .001$ . The experimental group reported higher cultural identity integration (Adj.  $M = 51.3, SE = 0.8$ ) than controls (Adj.  $M = 44.1, SE = 0.8$ ),  $d = 0.87$ .

These improvements were maintained at the 2-month follow-up.

Table 1. Between-group comparisons of post-test outcome measures (ANCOVA)

| Measure | Group               | Adj. M | SE  | F-value         | p-value  | Effect Size<br>(Cohen's d) |
|---------|---------------------|--------|-----|-----------------|----------|----------------------------|
| GAD-7   | Intervention (n=50) | 5.2    | 0.4 | $F(1,97)=32.15$ | $< .001$ | 0.85                       |
|         | Control (n=50)      | 8.9    | 0.4 |                 |          |                            |
| PHQ-9   | Intervention (n=50) | 5.8    | 0.5 | $F(1,97)=28.43$ | $< .001$ | 0.78                       |
|         | Control (n=50)      | 9.1    | 0.5 |                 |          |                            |
| PSS     | Intervention (n=50) | 16.1   | 0.6 | $F(1,97)=41.09$ | $< .001$ | 0.91                       |
|         | Control (n=50)      | 21.8   | 0.6 |                 |          |                            |
| CIIS    | Intervention (n=50) | 51.3   | 0.8 | $F(1,97)=35.22$ | $< .001$ | 0.87                       |
|         | Control (n=50)      | 44.1   | 0.8 |                 |          |                            |

Note: All analyses controlled for pre-test scores. Cohen's  $d$  was calculated based on adjusted means. Effect size benchmarks: small (0.20), medium (0.50), large (0.80). All between-group differences were maintained at the 2-month follow-up assessment.

#### 4.2. Qualitative findings

Thematic analysis of interview data yielded three primary themes:

1. Reframing duality through Yin-Yang: Students described no longer viewing their dual cultural existence as a conflict. "I used to feel torn. Now I see my Western side as Yang—active, analytical. My Chinese side is Yin—reflective, harmonious. I need both to be whole." (Participant 7, Female).

2. "Wu Wei" as an antidote to academic striving: Participants reported applying "Wu Wei" to reduce anxiety. "Before exams, I'd force myself to study 12 hours. Now I focus on 'flow'—preparing diligently but then trusting the process. It feels less panicked." (Participant 12, Male).

3. Cultivating mindfulness through cultural heritage: Students valued mindfulness through a Chinese lens. "I'd tried apps like Headspace, but it felt like another Western import. Learning about Chan made it feel like I was rediscovering a part of myself, not adopting something foreign." (Participant 3, Female).

### 5 Discussion

This study provides strong evidence that a counseling program integrating Chinese Traditional Culture is highly effective in addressing the specific mental health challenges of SFCU students. The significant quantitative improvements, with large effect sizes, demonstrate the intervention's potency in reducing anxiety, depression, and stress while fostering a more cohesive cultural identity.

The qualitative findings are crucial for explaining how the program worked. The themes align perfectly with the hypothesized mechanisms of change: CTC concepts provided a culturally familiar framework for students to reframe their core struggles. Yin-Yang theory directly addressed identity conflict, "Wu Wei" directly countered performance anxiety, and Chan mindfulness provided a culturally authentic path to emotional regulation. This suggests that the intervention's success lies in its cultural congruence; it speaks students' language, both literally and philosophically.

Implications for practice: SFCU counseling centers should strongly consider integrating CTC principles into their services. This can be done through dedicated therapy groups, training for counselors in CTC concepts, and workshops during orientation.

Limitations and future research: Limitations include the use of a single SFCU site and some self-developed scales. Future research should implement a multi-site randomized controlled trial (RCT) and explore the longitudinal impact of such programs on academic performance and long-term well-being.

### 6 Conclusion

For students navigating the complex cross-cultural landscape of a Sino-Foreign Cooperative University, well-being interventions must be as hybrid and innovative as the institutions themselves. This study demonstrates that turning inward to cultural heritage — the wisdom of Taoism, Buddhism, and Confucianism—can provide a powerful outward solution. The "Cultural Anchor Program" offers an effective, culturally resonant model that helps SFCU students not only cope, but also thrive by transforming a source of potential conflict—their cultural identity—into their greatest psychological strength.

#### Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

#### References

- [1] Braun V, Clarke V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2): 77-101.
- [2] Cao C, Zhu DC, et al. 2016. An exploratory study of inter-relationships of acculturative stressors among Chinese students from six European union (EU) countries. *International Journal of Intercultural Relations*, 55: 8-19.

- [3] Cohen S, Kamarck T, Mermelstein R. 1983. A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4): 385-396.
- [4] Hwang KK. 2006. Constructive realism and Confucian relationalism: An epistemological strategy for the development of indigenous psychology. *Indigenous and Cultural Psychology: Understanding People in Context*, 73-107. Springer.
- [5] Kroenke K, Spitzer RL, Williams JB. 2001. The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9): 606-613.
- [6] Deng J, Marshall T, Imada T. 2025. Cultural intelligence, acculturation, adaptation and emotional displays of other-condemning emotions and self-conscious emotions among Chinese international students in the UK. *International Journal of Intercultural Relations*, 105.
- [7] Li J, Xue E. 2022. Sino-Foreign cooperation of running schools in China. *Opening Education to the Outside World*. Part of the book series: *Exploring Education Policy in a Globalized World: Concepts, Contexts, and Practices*. Springer, Singapore.
- [8] Bamber MD, Morpeth E. 2019. Effects of mindfulness meditation on college student anxiety: a meta-analysis. *Mindfulness*, 10: 203-214.
- [9] Spitzer RL, Kroenke K, Williams JB. 2006. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166(10): 1092-1097.
- [10] Apolinário-Hagen J, Drüge M, Fritsche L. 2020. Cognitive behavioral therapy, mindfulness-based cognitive therapy and acceptance commitment therapy for anxiety disorders: integrating traditional with digital treatment approaches. *Adv Exp Med Biol*, 1191: 291-329.
- [11] Yip KS. 2004. Taoism and its impact on mental health of the Chinese communities. *Int J Soc Psychiatry*, 50(1): 25-42.