

Creative arts intervention to reduce academic burnout in college students: an Exploration Analysis

Bo Zhang¹, Azizah binti Abdullah²

¹(Guizhou Equipment Manufacturing Polytechnic, Guiyang, China)

²(School of Education, College of Arts & Science, Universiti Utara Malaysia, Malaysia)

Corresponding author: Bo Zhang

ABSTRACT: Faced with escalating academic burnout among college students, characterized by comprehensive exhaustion and impacting mental health and academic performance, this study assessed the efficacy of Creative Arts Therapy (CAT) as an innovative intervention. CAT promotes healing and mental health through creative expression, necessitating exploration as a solution beyond conventional psychotherapeutic interventions. The intervention, designed in collaboration with an experienced art therapist, consists of four 120-minute sessions focused on self-awareness, stress management, and the purpose of learning. The assessment tools include pre- and post-intervention "College Student Academic Burnout Scale" and participant feedback. Involving 10 participants, the study demonstrates significant improvements in emotional exhaustion and behavioural avoidance, while changes in accomplishment reduction were not statistically significant. Qualitative feedback highlighted the intervention's positive impact. This study suggests that CAT could be a practical approach to combat academic burnout, urging further research to confirm these findings and explore broader applications.

Keywords - creative arts therapy, academic burnout, pilot study

I. INTRODUCTION

Higher education provides students with new social environments and career paths and may bring specific stress (Hwang & Kim 2022). While school-related stress is a shared experience, chronic stress can culminate in academic burnout (Vizoso et al. 2019). This condition, characterized by physical, cognitive, and emotional exhaustion, arises from prolonged exposure to high levels of academic stress (Schaufeli et al. 2002). Recent studies have indicated an escalating risk of academic burnout among college students, a trend corroborated by multiple investigations (Rosales-Ricardo et al. 2021; et al. 2021; Liu et al. 2023). Beyond impairing motivation and academic achievement, academic burnout adversely affects students' overall well-being, contributing to mental health issues such as depression and anxiety, and may even result in increased dropout rates (Evers et al. 2020; Marôco et al. 2020; Fiorilli et al. 2020; Lyndon et al. 2017).

Internationally, academic burnout among higher education students has become a significant concern (Fariborz et al. 2019). This concern is pivotal as academic burnout not only elucidates the diverse behaviours exhibited by students but also impacts their dedication to college life, engagement in academic activities, and drive to persevere in their studies (Madigan & Curran 2020). Consequently, academic burnout profoundly influences all facets of a student's college experience. Identifying efficacious interventions is imperative in light of the detrimental effects of academic burnout. Prominent interventions encompass psychotherapeutic approaches such as cognitive-behavioural therapy, rational emotive behaviour therapy, and mindfulness training (Shankland et al. 2019; Oloidi et al. 2022; Anggreini et al. 2019; Tang et al. 2021). These approaches mitigate burnout by bolstering students' self-awareness and coping mechanisms. Nevertheless, these strategies may only partially alleviate academic burnout, primarily targeting individual-level challenges rather than instituting organizational reforms (Madigan et al. 2023).

Creative Arts Therapy (CAT) presents a distinctive intervention that fosters healing and mental well-being through creative expression (Hansen et al. 2020). Administered by trained professionals, CAT employs art-based methodologies and creative processes to promote well-being (Chiang et al. 2019). Within CAT sessions, individuals engage with and articulate their narratives through various creative modalities, such as

visual arts, music, dance, or literature. These artistic activities serve as vehicles for expressing challenging experiences, enabling participants to articulate emotions and experiences for which they may not have words and fostering a supportive environment for sharing vulnerable moments (Ibrahim & Abdullah 2022). This process often leads to developing new, more empathetic perspectives and forming a supportive community (Kapitan et al. 2011).

Although studies have employed CAT with college students, primarily targeting emotional expression, stress alleviation, self-awareness enhancement, and problem-solving skill improvement, its application for mitigating academic burnout remains unexplored (Wilson 2021; Yücesan & Şendurur 2017; Aaron et al. 2011; Zhang & Abdullah 2023). This paper seeks to investigate the potential of CAT in reducing academic burnout among college students, thereby addressing a significant research gap and contributing to a more holistic and efficacious psychological health support framework for this demographic. The study aspires to present an innovative, art-based intervention strategy designed to equip college students with the tools to manage academic stress, augment academic achievements, and elevate their mental well-being.

II. METHOD

The pilot study was collaboratively designed with a co-author, an experienced art therapist. It aimed to assess the efficacy of creative arts interventions in alleviating academic burnout among college students, facilitating better adaptation to their academic settings. The art therapist's expertise significantly informed the study's design, ensuring the interventions were innovative and tailored to address the student's unique challenges effectively. Based on consultations with participants, we established a format consisting of four sessions, each spanning 120 minutes. This duration was identified as the optimal balance between the participants' available time and the minimum intervention period deemed necessary by the art therapist to foster meaningful change. The sessions were conducted in an art therapy studio, drawing inspiration from Potash et al.'s (2014) research on burnout among end-of-life care workers, Huet's (2012) exploration of art therapy in organizational consulting, and Megan's (2018) study on burnout among oncology and palliative care professionals. The art therapist, with over six years of experience in educational settings, profoundly understands the psychological health and learning challenges college students face. The four sessions were carefully structured around three key themes pertinent to academic burnout: (1) Self-awareness, (2) Stress management, and (3) The purpose of learning.

Prior to the commencement of the course, participants were invited to attend a voluntary orientation session where the art therapist elaborated on the curriculum and objectives, emphasizing the distinctions between art-based activities and individual therapeutic interventions, as well as the heterogeneity of the group members' backgrounds. Moreover, the art therapist outlined the prerequisites for course enrollment, which entailed fostering mutual respect among participants and a commitment to consistent engagement within the group. To establish a non-judgmental, secure, and introspective group dynamic, participants were expected to affirm their adherence to the group's confidentiality policy and to offer peer support (Bitonte & Santo 2014). Those consenting to participate were requested to complete the "College Student Academic Burnout Scale" to evaluate their baseline levels (Lian et al. 2005).

Drawing on their substantial experience, the art therapist collaborated closely with the student cohort to strike a balance between fostering open sharing of personal experiences and ensuring professional boundaries. Art therapy, using metaphors as a subtle method for addressing and delving into issues, is uniquely equipped to maintain this critical equilibrium (Smith 2016). Moreover, the creative process of art-making allows participants to convey and process intense emotions, circumventing the necessity for extensive verbal articulation (Malchiodi 2013).

2.1 Self-awareness

The inaugural session centred on self-introductions, facilitating the integration of college students' identities into their personal and communal awareness. Recognizing and valuing individuality is a critical foundation, as it safeguards against burnout (Maslach et al. 1997; Potash et al. 2014). Participants engaged in crafting symbols that encapsulated their identities within the learning process. Creating personal symbols enabled them to delve into and articulate their inner psychological states, emotions, and experiences, facilitating a profound self-reflective journey (Isserow 2013).

2.2 Stress Management

The painting theme for the second session was "Draw Yourself Climbing (a) Mountain/s." At the beginning of the activity, participants were guided through meditation, imagining themselves facing a mountain symbolizing academic pressures and personal challenges. Following this introspective exercise, each utilized painting to depict their journey of confronting stress, managing it effectively, and ultimately achieving their objectives. This creative endeavour prompted a profound reflection on the identification, coping mechanisms, and management of diverse stressors along the path of personal growth. Upon completing their artworks, participants were encouraged to present their pieces and narratives, fostering a discussion on pinpointing stress-

inducing elements during their metaphorical climb, strategies for mitigating these burdens, and the importance of mutual support and individual tactics in realizing their goals. The art therapist played a pivotal role, offering essential support and direction to facilitate deep reflection and meaningful dialogue within the group.

This activity draws upon the theories and practices of art therapy, highlighting the importance of self-understanding, emotional release, and community support via creative expression and shared experiences (Malchiodi 2012; Buchalter 2004). The metaphor of climbing represents the individual's journey through academic challenges and pressures. Through artistic expression of this journey, participants gain enhanced insight into their stress management and uncover innovative strategies for attaining personal objectives.

2.3 The Purpose of Learning

The third session constituted the core of the activity, delving into deeper emotional content after participants had developed mutual familiarity and trust. Initiating with a guided meditation, participants were prompted to envision their post-graduation life scenarios, subsequently translating these mental images into paintings, a technique derived from Walsh and Hardin (1994). Subsequently, participants created a wheel chart to symbolize the various skills that need to be enhanced to realize these future lives (McIntosh 2003). Within this chart, they listed and rated their current proficiency in each skill, identifying areas for improvement. This method facilitated a more transparent plan and pinpointed specific skills requiring enhancement to achieve these goals. During the final phase, participants were urged to share their artwork and self-assessments, fostering communication and support within the group. The art therapist played a critical role throughout the session, aiding participants in exploring their emotional experiences through reflective listening, normalizing feelings, and connecting individual experiences to those of the group (Malchiodi 2012). Moreover, the therapist encouraged recognizing shared experiences and strengthening interparticipant connections. The session concluded with participants completing feedback forms anonymously and undertaking post-intervention assessments to measure the art intervention's effectiveness in mitigating academic burnout.

2.4 Participants

This study disseminated recruitment notices for an art therapy course among college students experiencing academic burnout who were willing to participate voluntarily on campus. To ensure the study's validity and the appropriateness of the participants, specific inclusion and exclusion criteria were established:

Inclusion criteria were as follows: 1) Being a currently enrolled full-time student at a higher education institution; 2) Self-reported experience of academic burnout and an interest in exploring art therapy as a coping mechanism; 3) Being at least 18 years old and capable of providing informed consent.

Exclusion criteria included: 1) Prior participation in similar expressive art therapy or psycho-educational programs, as this could influence the study's outcomes; 2) Severe psychological health issues, such as significant depression or anxiety disorders, that might disrupt the therapy process or research findings; 3) Concurrent engagement in other forms of psychotherapy or pharmacotherapy, to avoid interactions with the study's interventions; 4) An inability or unwillingness to complete the entire research process.

Participants constituted a self-selected, non-randomized sample who opted to participate in the art therapy course. All participants provided consent for using their artwork, College Student Academic Burnout Scale scores, and written feedback for research purposes.

2.5 Quantitative Measures

Quantitative assessments were conducted using the "College Student Academic Burnout Scale," tailored for the Chinese college student population to measure negative psychological states associated with the learning process. This scale evaluates dimensions such as emotional exhaustion, behavioural avoidance, and accomplishment reduction. Developed by Lian et al. (2005) within the framework of burnout theory and relevant scales, it is specifically attuned to the experiences of college students. The instrument comprises 20 items across three domains: emotional exhaustion, behavioural avoidance, and perceived achievement. Responses are recorded on a 5-point Likert scale. Statistical analysis involved conducting paired sample t-tests on the collected data.

2.6 Qualitative measures

After the course, the art therapist administered a feedback survey questionnaire. This questionnaire aimed to comprehensively gather participants' responses regarding the effectiveness of the group counselling activities through multiple-choice and open-ended questions. The areas covered included emotional expression, activity participation levels, personal growth, team interactions, and overall satisfaction. The authors analyzed the feedback content.

III. RESULTS

3.1 Sample characteristics

In the study, participants were recruited based on their scores of 60 or above (inclusive) on the academic status scale from a questionnaire survey. Through interviews, a group of 10 students, consisting of 6

males and 4 females, was selected. Attendance was nearly complete, with only one participant missing a single session.

3.2 Quantitative data

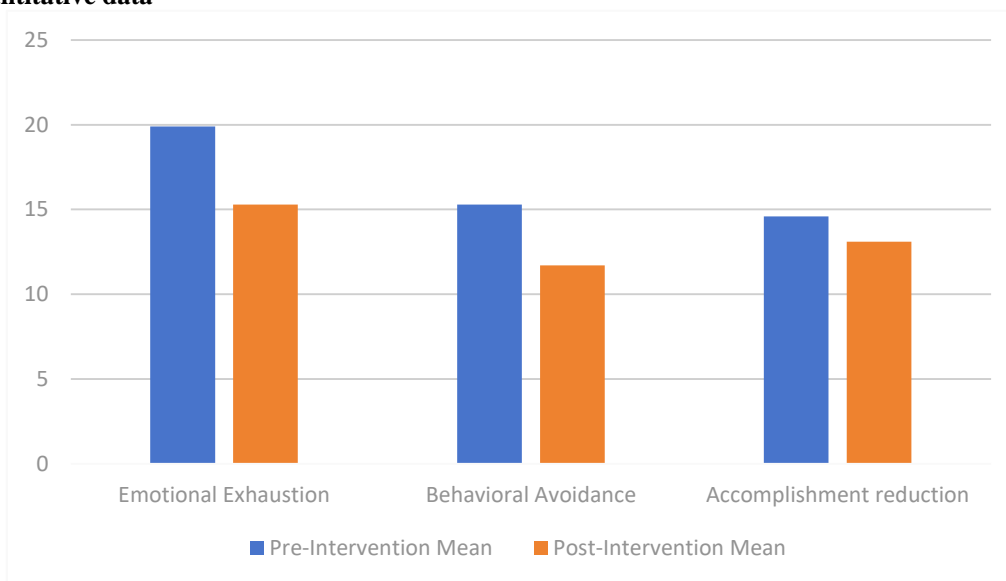


Fig. 1. Mean scores for subscales.

The data from the 10 participants revealed positive and significant improvements in two of the three subscales (Table 1, Figure 1). The average pre-intervention emotional exhaustion score, derived from eight questionnaire items, was 19.9, significantly decreasing to 15.3 post-intervention ($p < 0.001$). Similarly, the behavioural avoidance score, also based on eight items, fell from an initial average of 15.3 to 11.7 after the intervention, indicating a statistically significant reduction ($p < 0.001$). However, the accomplishment reduction score, calculated from eight items with an initial average of 14.6, reduced to 13.1 post-intervention, but this change was not statistically significant ($P = 0.187$).

Table 1. Mean scores for subscales.

Subscale	Pre-Intervention (SD)	Post-Intervention (SD)	Change (SD)	Significance (p)
Emotional Exhaustion	20.10 (2.13)	16.00 (2.58)	-4.10 (3.35)	<0.001
Behavioural Avoidance	15.30 (1.83)	11.90 (1.66)	-3.40 (2.47)	0.007
Accomplishment reduction	14.40 (0.84)	13.20 (2.90)	-1.20 (3.02)	0.187

3.3 Qualitative data

We received feedback questionnaires from all ten participants. Eight out of ten participants reported that they could express their emotions effectively during the group counselling activities. Every participant enjoyed the group counselling sessions. Nine out of ten participants believed these activities deepened their understanding of the material and boosted their confidence in their studies. Moreover, most noted that the group activities improved their academic status and that the skills learned were applied to real-life scenarios.

Additionally, nine participants were willing to share their experiences with the group, and a similar number gained insights into others' perspectives. All found the group experience valuable, with most deeming it highly meaningful. The majority received the facilitator's leadership style. Unanimously, participants affirmed that the group counselling met their expectations. Open-ended responses indicated that the activities facilitated goal clarification, motivation enhancement, learning skill development, new friendships, and improved self-awareness.

3.4 Example artwork

The key themes articulated by participants were mirrored in their artistic creations. Figure 2 displays a piece from the inaugural session, depicting the blossoming of roses and exuberant life, which participants interpreted as symbols of the vitality and fruits of learning. The array of colours was seen as embodying the diversity and richness of educational experiences. Figure 3 presents an artwork from the second session, themed "ascending a mountain," where the summit's flag symbolizes academic goals. The drawing's station-like structures along the path denote rest stops for progress evaluation and strategy adjustment. The group of figures

ascending together signifies camaraderie and emotional support. A parallel mountain path denotes overcoming sequential challenges or goals. Figure 4, from the third session, reflects participants' aspirations to evolve into independent, confident, and positive individuals despite future adversities.



Fig. 2 Individual pieces from session 1.



Fig. 3 Individual pieces from session 2.



Fig. 4. Individual pieces from sessions 4.

IV. DISCUSSION

This study investigates the efficacy of creative arts interventions in mitigating academic burnout among college students. Recognizing the potential for academic burnout to adversely affect students' mental health and academic outcomes, identifying effective interventions is crucial. Initial steps in addressing burnout include symptom awareness and acceptance of support (Tjasink & Soosaipillai 2018). This research targets students with academic status scores above 60, a group likely more vulnerable to academic stress and burnout symptoms. The study's final sample comprises 10 participants (6 males and 4 females). Analysis of quantitative and qualitative data from these participants indicates that creative arts interventions significantly reduce emotional exhaustion and behavioural avoidance. However, the effect on accomplishment reduction is not statistically significant.

Art therapy can potentially mitigate academic burnout symptoms, which is supported by existing literature (Italia et al. 2008; Kaimal et al. 2019; Potash et al., 2015). In this study, we observed favourable shifts in the accomplishment subscale scores, although these did not reach statistical significance. Notably, Potash et al. (2015) documented a marked increase in accomplishment following a six-session art therapy intervention. Similarly, Italia et al. (2008) reported significant improvements across all three burnout subscales after a 13-session therapy program incorporating art therapy. These findings imply that a more extended intervention may be necessary to achieve substantial reductions in the burnout component of accomplishment.

The qualitative data revealed that participants overwhelmingly maintained a positive outlook on the creative arts group counselling activities. They perceived these sessions as instrumental in deepening the comprehension of their learning processes, bolstering their study-related confidence, and effectively applying their acquired knowledge in practical scenarios. Additionally, participant feedback highlighted the role of group counselling in fostering communication and mutual understanding, potentially leading to the formation of supportive social networks. This could mitigate the effects of academic burnout.

The artworks produced by participants encapsulated their perspectives on learning and personal development. Artistic expression enabled participants to give form to intangible notions like academic vitality, goal pursuit, and the surmounting of obstacles. This process likely facilitated a more profound understanding and emotional processing associated with academic burnout. The art's themes aligned with the questionnaires' responses, substantiating the potential of creative arts interventions to enhance self-awareness and emotional articulation.

This research examines the impact of creative arts interventions on reducing academic burnout among college students, highlighting its significance in fostering mental health and increasing learning motivation. Within higher education, academic burnout significantly impedes students' learning efficiency, psychological

health, and future career prospects. The integration of creative arts interventions into student support services represents a pioneering educational strategy. This method effectively mitigates academic burnout and concurrently enhances students' creativity and capacity for self-expression, contributing to their comprehensive development.

Although the outcomes of this research are promising, it is essential to acknowledge its limitations. The study's cohort comprised only 10 college students, rendering the sample size insufficient to ensure the findings' generalizability and robustness. Such a limited sample size may be susceptible to random variability, compromising the results' stability and applicability to a broader student demographic. Additionally, the absence of a control group precludes definitive conclusions regarding the direct impact of the creative arts interventions. Furthermore, the voluntary nature of participation could introduce self-selection bias into the study.

While this study offers initial support for employing creative arts interventions to mitigate academic burnout among college students, the limitations highlighted necessitate a cautious approach to interpreting and extrapolating the findings. Subsequent research should endeavour to expand the participant pool, incorporate a control group, and address potential self-selection bias. These measures will bolster the investigation's robustness and its outcomes' applicability.

V. CONCLUSION

Confronted with the escalating issue of academic burnout in higher education, this research revealed that a four-week creative arts therapy program improved students' academic burnout. These findings confirm the efficacy of art therapy in reducing academic burnout and introduce a groundbreaking contribution to the literature. The outcomes offer proof of art therapy's role in combating academic burnout, presenting valuable directions for future interventions across diverse student groups. Despite its limited scope, this study constitutes a crucial step forward in validating art therapy's role in diminishing academic burnout. Future investigations should aim to enlarge the sample size and consider integrating a control group to strengthen the evidence base for art therapy's impact on academic burnout. In conclusion, this research underscores the importance of integrating art therapy into support services for college students, highlighting its considerable promise in reducing academic burnout and promoting mental well-being.

REFERENCES

- [1]. R. E. Aaron, K. L. Rinehart, and N. A. Ceballos, Arts-based interventions to reduce anxiety levels among college students, *Arts & Health*, 3(1), 2011, 27–38. <https://doi.org/10.1080/17533015.2010.481290>
- [2]. C. Anggreini, D. Daharnis, and Y. Karneli, The effectiveness of group rational emotive behavior therapy to reduce student learning burnout, *International Journal of Research in Counseling and Education*, 3(2), 2019, 109–114. <https://doi.org/10.24036/00103za0002>
- [3]. R. A. Bitonte, and M. D. Santo, Art therapy: An underutilized, yet effective tool, *Mental Illness*, 6(1), 2014, 18–19. <https://doi.org/10.1108/mi.2014.5354>
- [4]. S. I. Buchalter, *A Practical Art Therapy* (Jessica Kingsley, 2004).
- [5]. M. Chiang, W. B. Reid-Varley, and X. Fan, Creative art therapy for mental illness, *Psychiatry Research*, 275, 2019, 129–136. <https://doi.org/10.1016/j.psychres.2019.03.025>
- [6]. H.-S. L. et al., Analysis on convergent factors related to the hopelessness of health college students, *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(4), 2021, 221–230. <https://doi.org/10.17762/turcomat.v12i4.498>
- [7]. K. Evers, S. Chen, S. Rothmann, A. Dhir, and S. Pallesen, Investigating the relation among disturbed sleep due to social media use, school burnout, and academic performance, *Journal of Adolescence*, 84, 2020, 156–164. <https://doi.org/10.1016/j.adolescence.2020.08.011>
- [8]. C. Fiorilli, E. Farina, I. Buonomo, S. Costa, L. Romano, R. Larcana, and K. V. Petrides, Trait emotional intelligence and school burnout: The mediating role of resilience and academic anxiety in high school, *International Journal of Environmental Research and Public Health*, 17(9), 2020, 3058. <https://doi.org/10.3390/ijerph17093058>
- [9]. B. W. Hansen, L.-K. Erlandsson, and C. Leufstadius, A concept analysis of creative activities as intervention in occupational therapy, *Scandinavian Journal of Occupational Therapy*, 28(1), 2020, 1–15. <https://doi.org/10.1080/11038128.2020.1775884>
- [10]. V. Huet, Creativity in a cold climate: Art therapy-based organizational consultancy within public healthcare, *International Journal of Art Therapy*, 17(1), 2012, 25–33. <https://doi.org/10.1080/17454832.2011.653649>
- [11]. E. Hwang, and J. Kim, Factors affecting academic burnout of nursing students according to clinical practice experience, *BMC Medical Education*, 22(1), 2022. <https://doi.org/10.1186/s12909-022-03422-7>

- [12]. J. Isserow, Between water and words: Reflective self-awareness and symbol formation in art therapy, *International Journal of Art Therapy*, 18(3), 2013, 122–131. <https://doi.org/10.1080/17454832.2013.786107>
- [13]. M. Ibrahim, and A. Abdullah, Helpful effects of creative expressive-bodily maps of emotions in psychotherapy with children and adolescents: A preliminary qualitative study, *International Journal of Education, Psychology and Counseling*, 7(46), 2022, 384–396. <https://doi.org/10.35631/IJEP.746029>
- [14]. S. Italia, C. Favara-Scacco, A. Di Cataldo, and G. Russo, Evaluation and art therapy treatment of the burnout syndrome in oncology units, *Psycho-Oncology*, 17(7), 2008, 676–680. <https://doi.org/10.1002/pon.1293>
- [15]. G. Kaimal, K. Carroll-Haskins, J. L. Mensinger, R. Dieterich-Hartwell, E. Manders, and W. P. Levin, Outcomes of art therapy and coloring for professional and informal caregivers of patients in a radiation oncology unit: A mixed methods pilot study, *European Journal of Oncology Nursing*, 42, 2019, 153–161. <https://doi.org/10.1016/j.ejon.2019.08.006>
- [16]. L. Kapitan, M. Litell, and A. Torres, Creative art therapy in a community's participatory research and social transformation, *Art Therapy*, 28(2), 2011, 64–73. <https://doi.org/10.1080/07421656.2011.578238>
- [17]. R. Lian, L. X. Yang, and L. H. Wu, The relationship and scale development of college students' professional commitment and academic burnout, *Acta Psychologica Sinica*, 05, 2005, 632–636.
- [18]. Z. Liu, Y. Xie, Z. Sun, D. Liu, H. Yin, and L. Shi, Factors associated with academic burnout and its prevalence among university students: A cross-sectional study, *BMC Medical Education*, 23(1), 2023. <https://doi.org/10.1186/s12909-023-04316-y>
- [19]. M. P. Lyndon, M. A. Henning, H. Alyami, S. Krishna, I. Zeng, T.-C. Yu, and A. G. Hill, Burnout, quality of life, motivation, and academic achievement among medical students: A person-oriented approach, *Perspectives on Medical Education*, 6(2), 2017, 108–114. <https://doi.org/10.1007/s40037-017-0340-6>
- [20]. D. J. Madigan, and T. Curran, Does burnout affect academic achievement? A meta-analysis of over 100,000 students, *Educational Psychology Review*, 33(2), 2020, 387–405. <https://doi.org/10.1007/s10648-020-09533-1>
- [21]. D. J. Madigan, L. E. Kim, and H. L. Glandorf, Interventions to reduce burnout in students: A systematic review and meta-analysis, *European Journal of Psychology of Education*, 2023, 1–27. <https://doi.org/10.1007/s10212-023-00652-8>
- [22]. C. A. Malchiodi, *Handbook of Art Therapy* (2nd ed., Guilford Press, 2012).
- [23]. C. A. Malchiodi, *Art Therapy and Health Care* (Guilford Press, 2013).
- [24]. J. Marôco, H. Assunção, H. Harju-Luukkainen, S.-W. Lin, P.-S. Sit, K. Cheung, B. Maloa, I. S. Ilic, T. J. Smith, and J. A. D. B. Campos, Predictors of academic efficacy and dropout intention in university students: Can engagement suppress burnout? *PLOS ONE*, 15(10), 2020, e0239816. <https://doi.org/10.1371/journal.pone.0239816>
- [25]. C. Maslach, S. E. Jackson, and M. P. Leiter, Maslach burnout inventory, in *Evaluating Stress: A Book of Resources* (Vol. 3, London: The Scarecrow Press, Inc., 1997).
- [26]. S. McIntosh, Work-life balance: How life coaching can help, *Business Information Review*, 20(4), 2003, 181–189. <https://doi.org/10.1177/0266382103204003>
- [27]. F. J. Oloidi, A. A. Sewagegn, O. V. Amanambu, B. C. Umeano, and L. C. Ilechukwu, Academic burnout among undergraduate history students: Effect of an intervention, *Medicine*, 101(7), 2022, e28886. <https://doi.org/10.1097/MD.00000000000028886>
- [28]. J. S. Potash, F. Chan, A. H. Y. Ho, X. L. Wang, and C. Cheng, A model for art therapy-based supervision for end-of-life care workers in Hong Kong, *Death Studies*, 39(1), 2014, 44–51. <https://doi.org/10.1080/07481187.2013.859187>
- [29]. Y. Rosales-Ricardo, F. Rizzo-Chunga, J. Mocha-Bonilla, and J. P. Ferreira, Prevalence of burnout syndrome in university students: A systematic review, *Salud Mental*, 44(2), 2021, 91–102. <https://doi.org/10.17711/sm.0185-3325.2021.013>
- [30]. W. B. Schaufeli, I. M. Martínez, A. M. Pinto, M. Salanova, and A. B. Bakker, Burnout and engagement in university students, *Journal of Cross-Cultural Psychology*, 33(5), 2002, 464–481. <https://doi.org/10.1177/0022022102033005003>
- [31]. R. Shankland, I. Kotsou, F. Vallet, E. Bouteyre, C. Dantzer, and C. Leys, Burnout in university students: The mediating role of sense of coherence on the relationship between daily hassles and burnout, *Higher Education*, 78(1), 2019, 91–113. <https://doi.org/10.1007/s10734-018-0332-4>
- [32]. A. Smith, A literature review of the therapeutic mechanisms of art therapy for veterans with post-traumatic stress disorder, *International Journal of Art Therapy*, 21(2), 2016, 66–74. <https://doi.org/10.1080/17454832.2016.1170055>

- [33]. L. Tang, F. Zhang, R. Yin, and Z. Fan, Effect of interventions on learning burnout: A systematic review and meta-analysis, *Frontiers in Psychology*, 12, 2021. <https://doi.org/10.3389/fpsyg.2021.645662>
- [34]. M. Tjasink and G. Soosaipillai, Art therapy to reduce burnout in oncology and palliative care doctors: A pilot study, *International Journal of Art Therapy*, 24(1), 2018, 12–20. <https://doi.org/10.1080/17454832.2018.1490327>
- [35]. C. Vizoso, O. Arias-Gundín, and C. Rodríguez, Exploring coping and optimism as predictors of academic burnout and performance among university students, *Educational Psychology*, 39(6), 2019, 768–783. <https://doi.org/10.1080/01443410.2018.1545996>
- [36]. S. M. Walsh and S. B. Hardin, An art future image intervention to enhance identity and self-efficacy in adolescents, *Journal of Child and Adolescent Psychiatric Nursing*, 7(3), 1994, 24–34. <https://doi.org/10.1111/j.1744-6171.1994.tb00201.x>
- [37]. E. Wilson, Novel solutions to student problems: A phenomenological exploration of a single session approach to art therapy with creative arts university students, *Frontiers in Psychology*, 11, 2021, 600214. <https://doi.org/10.3389/fpsyg.2020.600214>
- [38]. E. Yücesan and Y. Şendurur, Effects of music therapy, poetry therapy, and creative drama applications on self-esteem levels of college students, *Journal of Poetry Therapy*, 31(1), 2017, 26–39. <https://doi.org/10.1080/08893675.2018.1396730>
- [39]. B. Zhang and A. Abdullah, A review of the effectiveness of group psychoeducation and expressive arts therapy on academic burnout in adolescents, *World Journal of Education and Humanities*, 5(4), 2023, 167. <https://doi.org/10.22158/wjeh.v5n4p167>

**Corresponding author: Bo Zhang*

¹(School of Education, College of Arts & Science, Universiti Utara Malaysia, Malaysia)