

A Brief Group Cognitive Behavior Therapy for Undergraduate Migrant Students' Academic Anxiety: A Pilot Study

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Academic anxiety is one of the most common problems experienced by undergraduate migrant students, because of the various challenges they encounter in their studying place. Cognitive behavioral group intervention is found to be effective in treating academic anxiety. To explore the feasibility of a brief cognitive behavior group therapy focused on reducing academic anxiety in Indonesian undergraduate migrant students, a pre–post quasi-experimental design was used. A total of 6 participants (mean age= 19.3 years, SD= 0.52) who scored above 40 in The Student Worry Questionnaire were chosen. The Intervention was conducted in a total of 5 sessions, 2.5 hours long each. An individual follow-up interview was conducted two weeks after the last session. Friedman's ANOVA indicated a non-significant difference ($\chi_2 = 3.217$, $p = .241$) between pre-test (Mean rank = 2.33), post-test (mean rank = 2.25), and follow up (mean rank = 1.42). However, a post-hoc pairwise comparison showed a large effect size. Descriptively, the academic concerns subscale of 5 participants decreased from post-test to follow-up. Qualitative analysis showed that participants gained benefit from the CBT group intervention. Findings support the feasibility, preliminary efficacy and efficiency of those five weekly session interventions when applied to a sample of Indonesian migrant students.

Keywords: academic performance, anxiety, cognitive behavioral therapy, group therapy, undergraduate student

Academic anxiety is one of the most common problems experienced by undergraduate students. Academic anxiety is a distorted mindset accompanied by a physiological and behavioral response, caused by concerns about poor academic performance (Ottens, 1991). The transition from high school to university poses a series of new demands and challenges for students, leading to increased distress. This transition also entails adjustment, ranging from academic, personal, emotional, to social adjustments (Gray, Vitak, Easton, & Ellison, 2013). Most students suffer from

anxiety caused by academic triggers (Beiter et al., 2015).

Indonesia is an archipelago country with over 17.000 islands, in which each region has its own unique culture. As a developing country, the human resources and infrastructure has not been fully spread throughout all regions equally. Universities are also centered around the capital and large cities. This condition drives people to migrate to other major areas to learn at universities. Migration is an attempt to bridge the gap between individuals' aspirations and limited facilities in their

areas of origin (Crivello, 2011). Lack of education is one of the major reasons that encourage the youth population to move out of their hometown (Easthope & Gabriel, 2008).

Adjustment is more difficult for migrant students, where greater anxiety is found in migrant students than in local students (Niam, 2009). Migrant students encounter cultural differences such as language, lifestyle, and life values. They need to follow the local values, norms, and behavior guidelines in order to be accepted as members of a society (Fitri & Kustanti, 2018), in which it can become an additional stressor. Migrant students generally feel anxious about not being able to meet the educational standards at their new place (Devinta, Hidayah, & Hendrastomo, 2015; Utami, 2018). Prolonged anxiety can have an impact on the psychological condition of migrant students and their academic performance.

Academic anxiety can help motivate and improve performance to achieve a goal, by driving a student to complete assignments, and gain academic achievements (Donnelly, 2009). However, excessive anxiety can interfere with learning activities, such as reducing interest in learning, poor performance on exams, and poor task performance (DordiNejad et al., 2011). Academic anxiety can also lead to negative long-term consequences, such as causing procrastination, poor performance

in class, and withdrawal from social relationships (Mattoo & Nabi, 2012).

An effective intervention for academic anxiety is the Cognitive Behavior Therapy (CBT) approach. CBT helps clients by developing skill to identify situations, thoughts, and behavior that affect emotions and to change maladaptive thoughts and behaviours (Cully & Teten, 2008). CBT can also be conducted in individual or group settings, addressing the same issues within a group. Group intervention involves structured activities that create a therapeutic effect to each member of the group (Yalom & Leszcz, 2005). Previous research found group interventions are able to improve conditions of academic anxiety by altering and restructuring the cognition, emotion, and behaviour causing the symptoms (Dewinta & Menaldi, 2009; Kifli, Sunawan, & Jafar, 2019).

A group intervention can be a viable option to help undergraduate migrant students manage their academic anxiety. The present research aims to examine the effectiveness of brief group CBT in Indonesia. Given that CBT interventions have proved their effectiveness, the development of more cost-effective protocols is needed. Clinical interventions for anxiety generally involve eight to twelve weekly sessions (Wolgensinger, 2015). Hence, researchers aim to test whether five sessions would be sufficient to include the necessary elements of an intervention focused on academic anxiety.

Method

Design

A pre–post quasi-experimental design was used. Participants completed measures of academic anxiety at each time point. The Student Worry Questionnaire (SWQ) (Osman et al., 2001) was selected as a measure of academic anxiety. Participants also completed free text qualitative feedback at the end of the final session.

Participants

Academic anxiety profiles were defined through cut-off points above 40 on the SWQ, which indicates high anxiety according to the original cut-off scores.

the delivery media of the intervention. Interviews were conducted prior to the selection of participants, to make sure that all participants have similar academically related problems. From 44 participants who signed up for the therapy, 6 female students were chosen to be the final sample (Mean age= 19.3 years, SD = 0.52).

Instruments

A questionnaire to collect demographic data as well as measures of academic anxiety has been used. SWQ (30 items Osman, et al., 2001) was chosen to measure academic anxiety as it is a comprehensive instrument that examines various dimensions of anxiety in undergraduate migrant students. An Evaluation feedback

Table 1
Content of sessions

Session	Content
1	Participants introduction Therapy contract and informed consent Catharsis, each participants share about their experiences Understanding the causes of academic anxiety and its nature Introduction of cognitive behavioral model (Antecedents-Belief-Consequences; ABC model) Cognitive behavioral formulation of academic anxiety Practice: identifying ABC model
2	Brief review and summary of last session Introduction to Negative Automatic Thoughts (NAT) Practice: Identifying NAT Relaxation techniques: deep breathing and grounding Practice on relaxation techniques
3	Brief review and summary of last session Cognitive technique for NAT: Evidence for vs evidence against (evidence hunting) Practice: Evidence hunting
4	Brief review and summary of last session Cognitive technique for NAT: alternative thoughts Practice: developing adaptive alternative thoughts
5	Brief review and summary of all previous sessions Identifying internal and external resources that facilitate participants in maintaining their progress Identifying possible triggers and relapse symptoms Practice: Relapse prevention plan Practice: Positive journaling
Follow-up	Individual follow-up interview, 2 weeks after the last session

Inclusion criteria were: a) Undergraduate migrant students of Universitas Indonesia; b) SWQ score above 40; c) willing to participate in online group therapy for 5 weeks; d) able to use an online platform as

questionnaire was given at the end of the final session. The Evaluation questionnaire consisted of thirteen items on a 4-point Likert scale and some open-ended questions regarding the usefulness of the

therapy. Example items include: “How helpful were the therapy sessions?”; “What did you find the most helpful in the group therapy?”; and “What did you find the least helpful in the group therapy?”

Intervention

The group intervention consisted of five two-and-a-half hours long sessions held weekly, and one individual follow-up interview. Session 1 was dedicated to the understanding of the causes of academic anxiety and its adaptive/maladaptive nature. Session 2 and 3 were devoted to working with maladaptive beliefs and negative automatic thoughts. The goal of session 4 was making a new adaptive belief and mantra. Session 5 was dedicated to relapse prevention and managing setbacks. The detailed program of each session is presented in table 1. The overall purpose of the intervention was to help participants understand that the academic anxiety they feel is a result of negative automatic thoughts (NAT), and they have control of their own thoughts and behavior. Due to the Covid-19 pandemic, all sessions were delivered online using Zoom meeting, and interviews were conducted by phone call.

Statistical Analysis

A Friedman’s ANOVA test was used to analyze the differences between groups. Wilcoxon signed-rank tests were used as a post-hoc test to ascertain changes in the outcome measures between pre-intervention, post-intervention, and follow-up. The individual clinical change was evaluated through the qualitative measure. Evaluation and feedback questionnaires

were analyzed via frequencies and percentages for Likert-scale responses and thematic analysis (Creswell, 2007) for free text responses. Free text responses were read in detail themes that were related to each other were grouped together.

Ethical Clearance

Approval was obtained from the Faculty of Psychology, Universitas Indonesia Ethic Committee. Participants were recruited through an online broadcast. Those willing to enroll were informed about the study, going on a one-on-one interview. Selected participants signed informed consent prior to the first session of the intervention. Outcome measures were taken at the first, fifth, and follow-up two weeks after the final session ended. Participants were also asked to complete an evaluation feedback questionnaire at the end of the group therapy.

Results

Statistical Results

Friedman’s ANOVA analysis showed that there is no significant difference of academic anxiety ($\chi_2 = 3.217, p = .241$) between pre-test (Mean rank = 2.33), post-test (mean rank = 2.25), and follow up (mean rank = 1.42). A post-hoc test, as seen in table 2, has been given nonetheless to examine the comparison between groups of data. A Bonferroni Correction was applied to mitigate the familywise error rate. Accordingly, the critical value used for the post-hoc tests was $0.05/3 = 0.0167$.

Table 2
Post-hoc comparison between pre, post and follow-up

Time of measurement	Z	p-value	Effect Size (r)
Pre – Post	-0.943	.438	-0.38
Pre – Follow Up	-1.892	.094	-0.77
Post – Follow Up	-1.124	.313	-0.46

Participants Feedback

Participants were asked to complete a feedback questionnaire. Most participants rated group therapy as very helpful. The most useful techniques were evidence hunting (evidence for vs evidence against) and deep breathing.

Free Text Response

Table 3 describes the main themes and subthemes identified through a thematic analysis conducted on the free text responses.

concerns, empathize, and give support to each other.’

Group Progress. Some participants felt comfortable since the first session, while others showed reluctance to share at first. In the beginning, participants were waiting for each other to talk and share first: ‘It was unfortunate that we wasted a lot of time waiting for someone to share at the beginning. I wished I was more confident.’ In the first two sessions, participants tended to be passive, in which they only responded when facilitators asked them. However, participants were showing progress through the sessions, which was reflected in their

Table 3
Main themes and subthemes identified

Main themes	Subthemes	Description
Group setting	Universality	Perceptions of having shared experience
	Group progress	Group dynamics throughout the sessions
Therapeutic changes	Self-understanding	The Therapeutic benefit of understanding oneself
	New techniques	Therapeutic benefit of learning CBT techniques
Group delivery	Group facilitators	Role of group facilitators in guiding and facilitating the group
	Delivery method	Perceptions of the online delivery method

Group setting

Participants viewed the group setting as having therapeutic benefits, such as feeling not alone and encouraged to share. The group dynamics also showed participants’ progress, in terms of involvement, openness, and change of beliefs.

Universality. The group setting developed a sense of universality in participants: ‘I didn’t feel alone. We shared similar problems. I always thought I was suffering alone.’ This feeling of shared difficulties normalize their experience and helped them feel connected. They felt encouraged to be open and disclose their problems, and also to develop empathic understanding: ‘The group was so lively, we could tell our

involvement, initiative, and direction of communication. Participants were able to respond and share their point of view to other participants’ problems. ‘I was reluctant to share at first, but seeing others being so open, I felt encouraged to share too.’

Therapeutic Changes

All participants stated that the group therapy had improved their self-confidence in dealing with academic difficulties as well as daily life struggles. Two subthemes were identified as contributing factors to the improvement: having a better self-understanding and learning new techniques and coping strategies.

Self-Understanding. Participants described that the group therapy had improved their understanding of themselves, their problems, triggers, and how to cope better with difficulties: ‘I have a better awareness of what might trigger my anxiety’. This self-understanding also helped participants to appreciate themselves: ‘I feel more appreciative of my progress, ... and not to be so hard on myself’, and encouraged some of them to seek help when needed: ‘I gained a new perspective that it’s okay to seek help, especially to a mental health professional.’

New Techniques. Participants learned CBT techniques such as A-B-C (Antecedent-Behavior-Consequence) model, challenging automatic negative thought, and deep breathing relaxation: ‘I learned a lot, I’m able to reduce my anxiety, I feel more relaxed and relieved.’ Participants realized that their belief affected their feeling and behavior regarding academic anxiety. Group therapy helped them to recognize their maladaptive belief and develop alternative beliefs: ‘I used to think negatively about myself, but now I have the option to see things as neutral.’ For some participants, the most helpful technique was evidence hunting (evidence for vs evidence against), while for others was deep breathing technique. Moreover, participants said that the techniques they learned in the group therapy could be used in other areas of daily life as well: ‘I can also apply these techniques in other situations, because they are effective for me.’

Group Delivery

Perceptions on the group facilitators were positive, while perceptions on the delivery method and accessibility were mixed.

Group Facilitators. Group facilitators were identified as an important part of the group therapy. Group facilitators were seen as accepting, non-judgmental, encouraging, validating, able to offer insights, and able to deliver the content well: ‘The facilitators

and the contents were all very insightful, they were able to set a non-judgmental atmosphere in the group’. Facilitators also played a role in building a safe environment for participants to share their problems: ‘The facilitators set a safe and comfortable atmosphere, ... I feel heard and encouraged by their responses’.

Delivery Method. The group therapy was delivered online due to the pandemic situation. Most participants rated the online delivery method, including the digital worksheets, as good and easily accessible. Two participants said that they might not participate should the group therapy be conducted offline: ‘I feel like it would be too overwhelming for me to meet a lot of new people in person’. However, other participants wished they could meet in an offline group therapy setting: ‘It would be better to see each other face-to-face. I would feel more connected and excited’. The online delivery method was also prone to signal and sound interference: ‘Technical issues like signal and sound should be improved and anticipated more’.

Discussion

The present pilot study aimed to explore whether a brief group CBT is feasible in reducing academic anxiety in undergraduate migrant students. In general, by comparing the pre-test and follow-up academic anxiety scores, the group CBT managed to decrease the level of academic anxiety in participants. Despite that fact, statistical inferential analysis showed non-significant results. A small sample size may have decreased the statistical power and thus indicating a non-significant result. The effect size itself has been found to be large. The effect size of the pre-test and follow-up comparison showed a large effect ($r = -.77$) (Fritz, Moritz, & Richler, 2012). In other words, this brief group CBT module showed a clinical significance in reducing academic anxiety in undergraduate students. Effect size is a quantitative

measure of the magnitude of the experimenter effect. A large effect size with no statistical significance means there is some evidence for a meaningful effect (Fan & Konold, 2010). Therefore, a larger number of samples is needed in further research. Larger samples can be achieved by increasing the number of participants in each group, or increasing the number of therapy groups tested. When compared between pre-test and follow-up, almost all participants experienced a decrease in the level of reduction, especially in the academic concerns subscale. Unfortunately, not every subjective change and benefit experienced by participants can be assessed through objective measurements such as a questionnaire (de Silva, 2013). Hence, qualitative feedback and progress observation are important to evaluate the effectiveness of the brief group CBT. Participants reported some cognitive changes such as increased self-understanding related to sources of anxiety and their own beliefs using the Antecedents-Behavior-Consequences (A-B-C) Model. Participants also reported that they felt more relieved as they were able to share their problems openly and nonjudgmentally, and they also felt that they were not alone in their problems. Participants learned and gained various techniques applicable to manage thoughts that cause academic anxiety, which leads to changes in beliefs about academic concerns.

During the early sessions, participants showed minimum interactions within the group. One of the possible causes is that joining a group therapy itself can be an anxiety-provoking experience (Bernard et al., 2008). Moreover, it is to be noted that all participants had high anxiety scores. At this stage, participants were trying to form a sense of trust and belonging towards the group itself. The Early stages of group therapy were meant to build trust, connectedness, and belongingness between the participants in the group.

The therapeutic effect of universality and disclosure (Yalom & Leszcz, 2005) was even more enhanced and observable by the third to fifth session. Participants readily and more vulnerably opened and shared their problems. At the beginning of the session, communication tended to be one-way between the facilitator and the participants. As the session progressed, participants became interested in responding to one another. This change in the direction of communication is an indicator of the development process in the group (Arias-Pujol & Anguera, 2017). At the end of the second session, participants showed more trust to each other. According to participants' qualitative feedback, they felt that they were not alone in their anxieties and that others have similar issues.

Due to the Covid-19 pandemic, all sessions were delivered online. Although internet-based group interventions have already been applied in other countries, research in Indonesia on this particular subject is still scarce and has yet to be conducted and applied. There are several advantages even though the group CBT was conducted online. First, more flexible time and place, easier access, and suitable for younger participants because they are more familiar with technological development (Schuster, Pokorny, Berger, Topooco, & Laireiter, 2018). Next, the platform itself enables participants to use features such as raise hand and group chat, as well as the flexibility in filling out worksheets online. Participants also gave positive feedback on the facilities in conducting group therapy sessions.

However, several limitations are also present as a result of conducting the therapy online. An Unstable internet connection may hinder participants to turn on their video and sometimes get disconnected from the platform. This, in turn, may pose a disadvantage to the participants as it cuts their time and flow of the interaction within the group. Despite limitations, results

regarding the preliminary efficacy and efficiency of the brief group CBT are potential. Suggestion for further study may consider the inclusion of a control group or another intervention group as a comparison.

Conclusion

Results indicated that the module presented in the current pilot study can be applied in Indonesian undergraduate migrant students. The present study can become preliminary research to promote the application and further research of online group CBT in Indonesia. Findings support the feasibility, preliminary efficacy and efficiency of the five weekly session group CBT when applied to a sample of Indonesian undergraduate migrant students. However, further research is needed to support the present findings across various demographics.

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