Development of Acceptance and Commitment Therapy Group Counseling Models and Mindfulness-Based Stress Reduction to Reduce Academic Burnout in High School Students

Afriyadi Sofyan, M. Ramli, Sugiyo, Kusnarto Kurniawan

Abstract

The current pandemic has an impact on mental health, especially students who do online learning. In relation to burnout, this study aims to integrate Acceptance and Commitment therapy and Mindfulness-Based Stress Reduction to reduce burnout, experiments were carried out in groups for the application of ACT while MBSR materials were given online and practiced independently by each counselee after face-to-face meetings were held. This study uses educational design, research and development (Educational Research & Development), which is a research design that aims to produce or develop a product in the form of models, designs, prototypes, materials, media, tools or strategies, in order to improve the quality of learning. The educational R&D research design has ten stages as proposed by Borg & Gall. The stages are simplified and grouped into three stages, namely (1) Preliminary Study, (2) Development Phase, and (3) Validation Phase. The results of this study revealed that group counseling by applying Acceptance and Commitment therapy and Mindfulness Based Stress Reduction was proven to be able to reduce burnout. With the findings of this study, school counselors can make group counseling integrate ACR and MBSR therapy as an alternative to reduce student academic burnout at school.

Keywords: ACT: Group Counseling; MBSR; Students Academic Burnout.


Introduction

Academic Burnout is a problem that has recently been found by research in the educational environment. Researchers first introduced burnout as a psychological syndrome due to chronic stress associated with unmanaged work (Maslach, et al. 2001). Academic burnout is defined by feeling tired because of the demands of learning, feeling yourself not having potential in school, and not being bound by individuals to assignments or school work that occurs because of the boredom felt by students in the learning process (Schaufeli, et al. 2002).

Based on the results of the study, it was found that academic burnout of high school students is currently in the medium to high category (Hikmah, et al. 2020). Such conditions require action from the school, especially to facilitate students to feel safe and comfortable in the learning process.
Continuous academic burnout behavior can have a negative effect on the development of students in schools in the field of learning, including decreased academic achievement, neglect of assignments and learning processes, and the potential to be expelled from school (Kristian, et al 2020). This, of course, can hinder the process of fulfilling the developmental tasks of students.

The learning environment is suspected to have an influence on academic burnout, an environment that supports potential, provides comfort and safety, and freedom of expression in the learning environment can provide optimal mental health for students. This is different from the current conditions where the world is being hit by the COVID-19 pandemic which has an impact on limiting activities outside the home, which in turn forms a new regulation, namely studying at home. The limited space for movement, and learning activities carried out online at home, pose a challenge for students to be able to adapt to the new system, namely from face to face to online (Besser, et al. 2020), causing adverse effects on students’ mental health, including being vulnerable to stress, academic, unstable emotions, and burnout (Chandra, Y. 2020) This is a challenge for guidance and counseling in schools to empower students to be able to maintain mental health during the covid-19 pandemic.

Burke & Arslan (Saddiha, et al. 2014) wrote that providing interventions to support the mental health of students during the COVID-19 pandemic is very necessary, such as counseling services that can be done online. The benefits of online counseling are anonymity and easy accessibility, flexibility in terms of time and place, counselees can review materials as often as possible, and minimize stigma against counselees (Puolakanaho, et al. 2019). Burnout is a condition where individuals experience chaos in dealing with what is currently being experienced, emotional exhaustion that occurs in response to individual emotional and interpersonal stress, thus requiring interventions that can optimize the role of psychological flexibility in dealing with current situations and conditions.

Regarding burnout, (Puolakanaho, et al. 2020) integrated Acceptance and Commitment therapy and Mindfulness-Based Stress Reduction to reduce burnout, experiments were carried out in groups for the application of ACT while MBSR materials were given online and practiced independently by each counselee after face-to-face meetings were held. However, the weakness of this research is that it is done face to face, while the purpose of this research is to develop the model so that it can be done online without any direct meeting between the counselor and the counselee. The effectiveness of web-based ACT has been proven to support mental health in academic problems (Brown, et al. 2016). Support this research to develop a web-based ACT intervention by integrating other techniques.

In the ACT intervention, positive changes are expected to come from changes in processes associated with psychological flexibility (Hayes, et al. 2006). Then Lloyd, et al (2013) showed that the ACT-based intervention increased acceptance and action skills, namely skills related to psychological flexibility. In addition, they observed that these skills mediate changes in emotional exhaustion (the fatigue subdimension), which, in turn, prevents depersonalization experiences (another subdimension of burnout). Furthermore, Nyklíček & Kuijpers (2008) studied the effects of mindfulness-based stress reduction interventions (MBSR) and concluded that increased mindfulness could partially mediate the effects of perceived stress on quality of life. By integrating the two techniques proved to be effective for burnout, so the purpose of this research is to develop an online counseling model of Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction to reduce Academic Burnout in students.

Methods

This study uses educational design, research, and development (Educational Research & Development), which is a research design that aims to produce or develop a product in the form of models, designs, prototypes, materials, media, tools or strategies, in order to improve the quality of
learning (Borg, et al. 1996). The educational R&D research design has ten stages as stated by Borg & Gall (2006)). The stages are as follows: 1. Initial research and gathering information, 2 Planning, 3. Developing the initial product form, 4. Initial field testing, 5. Initial product revision 6. Main field testing, 7. Operational product revision, 8. Operational field testing, 9. Final product revision, 10. Dissemination and implementation.

Of the ten stages, then simplified and grouped into three stages, namely (1) Preliminary Study, (2) Development Phase, and (3) Validation Phase, (Samsudi. 2009). These stages are then described in the chart below

**Figure 1 Guide development stage**

**Population and Sample**

The population in this study were high school students in the city of Semarang, according to the purpose of the study the sample was taken by purposive sampling technique which was first determined from the identification of students who experienced burnout using the School Burnout Inventory (SBI) scale instrument. Furthermore, 10 students were determined, of which 5 students attended group counseling as the treatment group and 5 students in the control group.

**Data Collection Techniques and Instruments**

This study uses several techniques and data collection instruments that are used as a basis for determining the level of effectiveness, efficiency, and/or attractiveness of the resulting product. The type of data in this study is quantitative data collected using an adaptation of the School Burnout Inventory (SBI) scale compiled by Aro, et al (2009). The SBI scale includes three indicators, namely: (1) emotional exhaustion at school, (2) cynicism about the meaning of school, and (3) feelings of inadequacy at school. The indicators are then arranged in 9 statement items as follows:
Table 1. Indicators and Items of the School Burnout Inventory (SBI) Scale

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Statement</th>
<th>Item No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Emotional exhaustion at school</td>
<td>Since school was conducted online I feel overwhelmed with schoolwork</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Since online school I often don't sleep well because of things related to school assignments</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>In my spare time during online school, I contemplate a lot of things related to school assignments</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The pressure of online schoolwork causes problems in my relationships with close people</td>
<td>4</td>
</tr>
<tr>
<td>2 Cynicism about the meaning of school</td>
<td>I feel less motivated to do schoolwork online and often think about giving up</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Since school was conducted online I feel I have lost interest in completing school assignments</td>
<td>6</td>
</tr>
<tr>
<td>3 Feelings of inadequacy at school</td>
<td>I keep wondering if these online school assignments have any meaning</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>I often feel unable to do schoolwork online</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>I used to have high hopes of being able to complete schoolwork online, but not anymore</td>
<td>9</td>
</tr>
</tbody>
</table>

The School Burnout Inventory scale is made using 5 (five) answer choices that can be chosen by students with the following information:
1: Completely disagree
2: Partly disagree
3: Disagree
4: Agree
5: Completely agree

The instrument data uses the School Burnout Inventory (SBI) scale which has been filled in by students and then analyzed with the Rasch Model and further tests of Descriptive Statistical Analysis and the Mann-Whitney U Test assisted by the Winstep and JASP applications.

Results and Discussions

As previously explained, the applied research carried out in this case is to apply online group counseling with Acceptance and Commitment Therapy by combining Mindfulness-Based Stress Reduction to reduce Academic burnout.

Student's Academic Burnout Level Assessment

The first step is to conduct an assessment to identify students who experience the level of Academic burnout who will then be provided with services. The results of the assessment used the School Burnout Inventory (SBI) compiled by Aro, et al. From the instrument that was distributed using google form with the help of a counseling teacher at SMA 15 to students in grades 11 and 12 majoring in Mathematics and Natural Sciences and Social Sciences, data was obtained as many as 188 students (data attached). Furthermore, the data is processed using the Winstep application with the Rasch model to identify students who experience academic burnout starting with mild to very severe symptoms. The results of the analysis (data attached) found that 34 students out of 188 students (18%) experienced academic burnout in the high category and there were 61 students (32%) experienced academic burnout in the medium category.

Group Formation (Group)

The second step is to form a counseling group based on the results of identification through previous assessments, in connection with the counseling group that will be provided services in the interest of this study is to compare the group that is given treatment (treatment) and the control group, meaning that there are two groups (group) formed in the context of research interests.

In the concept of group counseling regarding the number of members in the group as explained by Latipun (2001) if the group is less than 4 people, the dynamics that are expected to exist and have an impact on members will be less or not occur. However, if the group members are too large, for example
more than 12 people, the group counseling process will be difficult. On the other hand, the implementation of counseling must also pay attention to the principles contained in it. One of the principles that is important and has a great influence on both the process and the results of the counseling carried out as described by Prayitno (2004) is the principle of volunteerism. This means that group members who will participate in group counseling are members who really consciously and voluntarily without any coercion have the intention and desire to participate in counseling service activities. Based on these considerations, socialization and communication were carried out to students identified as experiencing academic burnout by providing information or offering group counseling services through WhatsApps. From the feedback or answers to the information and offers of group counseling services that will be provided, a number of students are obtained which are then grouped in the following table:

Table 2. List of students identified as having experienced academic burnout and being provided with online group counseling services

<table>
<thead>
<tr>
<th>No</th>
<th>Name (initial)</th>
<th>Class/major study</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IN</td>
<td>12 - IPS 1</td>
<td>Experiment</td>
</tr>
<tr>
<td>2</td>
<td>HE</td>
<td>12 - IPS 1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MU</td>
<td>12 - IPA 6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ME</td>
<td>12 - IPS 3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SA</td>
<td>12 - IPA 2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>AQ</td>
<td>12 - IPA 2</td>
<td>Control</td>
</tr>
<tr>
<td>7</td>
<td>TI</td>
<td>11 - IPS</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>KI</td>
<td>11 - IPA 6</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>AU</td>
<td>11 - IPA 6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>FA</td>
<td>11 - IPA 5</td>
<td></td>
</tr>
</tbody>
</table>

Development of an online group counseling model with Acceptance and Commitment Therapy by combining Mindfulness-Based Stress Reduction in order to reduce Academic burnout

In accordance with the planning of this research which is an applied-research on the group counseling model, namely by applying Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction to reduce web-based (online) academic burnout in SMA 15 students in Semarang City and according to the research design and procedures described as follows:

Stage 1 (Introduction); by conducting theoretical studies and objective studies on several things, namely, web-based counseling (online), group counseling, concepts and practices of Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction, the concept of academic burnout that occurs in high school students. Theoretical studies are carried out by examining the latest theories and research findings, sources/references using books and scientific journal articles that can be accessed online as well as practically obtained from studies/discussions, trainings/workshops available from YouTube. The results of the theoretical study are the basis for the implementation of group counseling modules that will be conducted online. An objective study was conducted by seeking information related to the phenomenon of academic burnout that occurred in SMA 15 students. The data was obtained from the results of the distribution of the instrument using the school burnout inventory (SBI) scale. Reports/news related to the phenomenon of academic burnout from news/mass media, then also through BK teachers SMA 15. Objective study obtained data that the phenomenon of academic burnout occurs in students, especially high school students during online learning.

Stage 2 (Development); The development carried out is related to the formulation of the development of online group counseling with Acceptance and Commitment Therapy by combining Mindfulness-Based Stress Reduction in order to reduce Academic burnout. The results of the formulation of the development plan are then broken down into a product design which is developed in the form of a module entitled Online Group Counseling Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction to reduce Student Academic Burnout.
Stage 3 (Product Validation); at this stage, it is done by validating the online counseling module that has been made by asking validators for help from experts and practitioners. The expert validator is 1 person from academia/online counseling expert. 1-person Online counseling and therapy expert. Then 1 expert model of the counseling approach. Furthermore, 2 people as experts as well as group counseling practitioners. Validation is carried out to see the product from the technical aspects of the model structure, the usability aspect, the relevance aspect, the feasibility aspect, and the consistency aspect. The results of module validation from 3 validators obtained several notes. In general, the module received a good rating and can be used.

Stage 4. (Empirical test); The module results from the counseling model that have been made are then empirically tested by counselors and teachers to a number of counselees who have been identified as experiencing academic burnout. The implementation of online group counseling by integrating Acceptance and Commitment therapy (ACT) and Mindfulness-Based Stress Reduction (MBSR) to reduce academic burnout is carried out over a period of one month with synchronous meetings via the Zoom meeting platform for 4 virtual meeting sessions. The empirical test that was carried out produced factual evidence of the module application with the outcomes of the counseling carried out. From the results of the analysis of the Rasch model of the pre-test and post-test scores, the following data were obtained:

Table 3. Academic Burnout Scores from pre-test and post-test results

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Group</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IN</td>
<td>Experiment</td>
<td>0.45</td>
<td>0.52</td>
</tr>
<tr>
<td>2</td>
<td>HE</td>
<td></td>
<td>0.82</td>
<td>2.89</td>
</tr>
<tr>
<td>3</td>
<td>MU</td>
<td></td>
<td>2.04</td>
<td>4.63</td>
</tr>
<tr>
<td>4</td>
<td>ME</td>
<td></td>
<td>1.19</td>
<td>2.89</td>
</tr>
<tr>
<td>5</td>
<td>SA</td>
<td>Control</td>
<td>0.61</td>
<td>1.22</td>
</tr>
<tr>
<td>6</td>
<td>AQ</td>
<td></td>
<td>0.44</td>
<td>0.47</td>
</tr>
<tr>
<td>7</td>
<td>TI</td>
<td></td>
<td>1.20</td>
<td>1.24</td>
</tr>
<tr>
<td>8</td>
<td>Ki</td>
<td></td>
<td>0.66</td>
<td>0.70</td>
</tr>
<tr>
<td>9</td>
<td>AU</td>
<td></td>
<td>0.88</td>
<td>0.90</td>
</tr>
<tr>
<td>10</td>
<td>FA</td>
<td></td>
<td>2.06</td>
<td>2.04</td>
</tr>
</tbody>
</table>

The scores obtained in table 3 above were then analyzed with nonparametric statistics for the Wilcoxon Signed Rank Test using the JASP statistical analysis platform application to compare the difference between the two means of the pretest and posttest scores. The results of calculations with JASP obtained data as shown in table 4 below.

Table 4 Descriptive Statistics of Wilcoxon test

<table>
<thead>
<tr>
<th>Paired Samples T-Test Experiment Group</th>
<th>Measure 1</th>
<th>Measure 2</th>
<th>Test</th>
<th>Statistic</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Post Test</td>
<td>Student</td>
<td>-3.732</td>
<td>5</td>
<td>0.014</td>
<td>0.031</td>
</tr>
<tr>
<td>Wilcoxon</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paired Samples T-Test Control Group</th>
<th>Measure 1</th>
<th>Measure 2</th>
<th>Test</th>
<th>Statistic</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Post Test</td>
<td>Student</td>
<td>-3.566</td>
<td>5</td>
<td>0.514</td>
<td>0.052</td>
</tr>
<tr>
<td>Wilcoxon</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wilcoxon's non-parametric statistical test guideline if the significant level z <0.05 then indicates there is a relationship between the variables, whereas if the significant level is > 0.05 then there is no relationship between the variables. Based on table 4 related to the Test Statistics above, the significant level obtained is a determination of z of 0.031 or a significant level of <0.05 meaning that there is a difference in...
the level of student academic burnout before and after applying online group counseling with Acceptance and Commitment Therapy by combining Mindfulness-Based Stress Reduction in order to reduce academic burnout. Based on the scale test, it can be concluded that online group counseling with Acceptance and Commitment Therapy by combining Mindfulness-Based Stress Reduction is effective in reducing academic burnout.

The COVID-19 pandemic has proven to have a real impact on student health in schools, as found in recent studies related to students' mental health in online learning. Sonartra, E. N. (2021); Khoiriyah, K., et al (2021); Meutia, A. (2020); Choirunissa, R., et al (2020); Rosyad, Y. S, et al (2021). From the results of the assessment carried out in this study, it is proven that the level of student academic burnout is considered to be concerning because it tends to be high. These findings should be a concern not only for all parties involved in education, but also stakeholders to parents who are more intense with students at home.

However, the impact on students' mental health cannot be ignored and allowed to happen, it is feared that disturbed mental health will have a further impact on students' lives in other ways, for example in terms of their personal and social lives. Students who experience academic burnout, in which one of the indicators is emotional exhaustion, one of the forms of which is the pressure of online school assignments causing problems in student relationships with close people. The close people meant are, of course, significant people in the student's life, both parents, family and playmates. If you review the personality theory of Carl Rogers, (in Amalia, L. 2016) it is explained that one of the individual personality structures depends on the social environment. Thus, it can be understood that parents as the closest social party/environment have a major role in the formation of students' personalities. So, if the relationship with parents has problems, it can be ascertained that it will cause other problems, namely from social relations to the development of their personality.

On the other hand, mental health disorders including burnout if accumulated with other psychological disorders that last a long time can increase other risks. Alharbi J, et al (Rachmadi, M. 2021), revealed that burnout has become a psychosocial problem in the past 10 years. The prevalence of symptoms associated with burnout includes anxiety, depression, low satisfaction, PTSD and increased suicide rates. Seeing the phenomenon above, it is appropriate for educators (teachers) in schools to make real efforts by providing responsive educational services, because in principle education must be carried out or carried out without causing physical and psychological pressure. Distance learning (PJJ) should be able to facilitate learning that is still fun and provide added value to students' insights, knowledge, values, skills. For this reason, innovation is needed in models, techniques and distance learning media / online as stated in the latest research Khotimah, S. K. S. H. (2021); Putra, M. A., & Shofaria, N. (2020); Atsani, K. L. G. M. Z. (2020); Fahrina, A., et al (2020); Sari, I. K. (2021). In the end, all of that is an effort to create effective and fun learning, so that learning can be carried out without causing physical and psychological burdens on students.

For School Counselors in implementing educational services in schools, it is in the form of counseling services. In order to create services that are certainly not only fun but also have a positive and productive impact/effect on students' lives. Innovation and service improvisation on existing conditions is a challenge in itself. Through online group counseling by applying the Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction models, it is an effort to create an alternative in guidance and counseling services in schools that has proven effective in reducing academic burnout for high school students.

The results of the empirical test in this study conclude that online group counseling by applying the Acceptance and Commitment Therapy (ACT) and Mindfulness-Based Stress Reduction (MBRS) models as an alternative in guidance and counseling services in schools has proven to be effective in reducing academic burnout for high school students. This finding supports a number of previous studies, where the efforts of ACT and MBRS together or separately have a positive impact on students' psychology.

As has been explained that in relation to burnout, Puolakanaho, et al. (2020) integrated Acceptance and Commitment therapy and Mindfulness-Based Stress Reduction to reduce burnout, the experiment was carried out in groups for the application of ACT while the MBSR material was given online and practiced independently by each counselee after face-to-face meetings are held. However, the weakness of this research is that it is done face to face, while the purpose of this research is to develop the model so that it
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In the ACT intervention, positive changes are expected to come from changes in processes associated with psychological flexibility (Hayes, et al. 2006). Then Lloyd, et al (2013) showed that the ACT-based intervention increased acceptance and action skills, namely skills related to psychological flexibility. In addition, they observed that these skills mediate changes in emotional exhaustion (the fatigue subdimension), which, in turn, prevents depersonalization experiences (another subdimension of burnout). Furthermore, Nyklíček & Kuijpers (2008) studied the effects of mindfulness-based stress reduction interventions (MBSR) and concluded that increased mindfulness could partially mediate the effects of perceived stress on quality of life. By integrating the two techniques proved to be effective for burnout, so the purpose of this research is to develop an online counseling model of Acceptance and Commitment Therapy and Mindfulness-Based Stress Reduction to reduce Academic Burnout in students.

However, these previous studies were limited to the services provided face to face. For this reason, this research provides a new perspective by doing it online. This may provide an alternative for school counselors amid the limitations that can only be provided by online services.

Conclusions

Online learning during a pandemic has an impact on students' psychology, one of which is academic burnout. The level of academic burnout in high school students is dominant in the medium and high categories. Educators, one of which is a school counselor, must provide responsive and innovative educational services. Online group counseling by applying the Acceptance and Commitment Therapy model and Mindfulness-Based Stress Reduction as an alternative in guidance and counseling services at school has proven to be effective in reducing academic burnout in high school students. The implementation of online group counseling has obstacles and challenges, especially from the internet network and the readiness and skills of students and counselors.

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References


Counselling, 26(1), 53–59. https://doi.org/10.1080/03069889808253838