Comparison of the Effectiveness of CBT Group Counseling with Passive vs Active Music Therapy to Reduce Millennials Academic Anxiety

Dominikus David Biondi Situmorang¹, Mulawarman Mulawarman², & Mungin Eddy Wibowo³

¹Universitas Katolik Indonesia Atma Jaya, Jakarta, Indonesia, ²,³Universitas Negeri Semarang, Jawa Tengah, Indonesia

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ABSTRACT

The purpose of this research is to know the effectiveness of counseling group implementation of cognitive behavior therapy (CBT) approach with passive and active music therapy technique in reducing academic anxiety millennials students. This study used quasi-experimental design with repeated measures (pretest, posttest, and follow-up). Group counseling was conducted for 5 meetings (@ 100 minutes), and follow-up was performed after 2 weeks of treatment. Research subjects used in this study are 14 millennials generation millennials students divided into two groups. The results showed that during pretest vs. posttest, CBT group counseling with passive was more effective for reducing academic anxiety compared to active music therapy. In pretest vs follow-up, active was more effective for reducing academic anxiety compared with passive music therapy. Furthermore, posttest vs. follow-up, active was more effective for reducing academic anxiety compared with passive music therapy with an increased academic anxiety after two weeks of treatment.

Keywords:
- group counseling
- cognitive behavior therapy
- passive music therapy
- active music therapy
- academic anxiety
- millennials generation

1. Introduction

Nowadays, the undergraduate the undergraduate thesis is the final project which leads to high anxiety for most millennials students in Indonesia (Situmorang, 2017a, 2017b, 2018). Anxiety towards such a undergraduate the undergraduate thesis is a form of academic anxiety at the college level (Ottens, 1991). Many of the millennials students who still do not have the skills to write a qualified, and no interest in research. Furthermore, the low motivation of achievement and the creativity of the millennials students in the effort of completion of this final project, are some predictors that can be the spotlight (Situmorang, 2016). If this continues to be allowed, it will result in negative symptoms in the physical and psychological aspects that may hinder millenniums students in their study process. Most millenniums students who experience academic anxiety to this the undergraduate thesis will tend to do negative things that can harm themselves, especially doing things that are non-productive so tend to be procrastinator (Situmorang, 2017b, 2018).

In this regard, it is important to undertake a preventative intervention service to prevent this phenomenon upstream, and to conduct curative intervention services to treat those who have undergone this downstream academic anxiety (Situmorang, 2017a). The education counselors in universities are expected to always be proactive in preventing and treating millenniums students who have academic anxiety to this undergraduate thesis. In addition, education counselors are expected to perform a more effective and optimal counseling
intervention service in tackling this problem. One of the modern counseling intervention services offered by
integrative approach is through music (Capuzzi & Gross, 2011; Sharf, 2012; White & Davis, 2011).

The use of music in counseling can increase the production of all four positive hormones present in the human
body, namely endorphins, dopamine, serotonin, and oxytocin. The functions of these four positive hormones
can make the body more relaxed, reduce anxiety or stress, increase happiness, improve intelligence, and
increase self-esteem (Mucci & Mucci, 2002; Djohan, 2006).

Giving music as one of the techniques in intervention service to assist millennials students in reducing
academic anxiety will be far more effective compared to conventional counseling intervention service that has
been done by education counselor, because with music student can reduce his anxiety towards the
undergraduate thesis and increase his confidence in solving essay.

Since 1992, Gladding (2016) introduced the use of music in counseling. Music is used as a medium to calm,
and help counselees to feel comfortable, so the counseling process becomes more effective. The use of music
in the counseling process is known as music therapy. Capuzzi and Gross (2011), and Sharf (2012), examined
music therapy as one form of expressive therapy intervention / creative arts in integrative counseling
approach, which can be applied in the counseling process.

Gladding (2016) suggests that in the modern counseling process it is hoped that counselors can integrate art
therapy in the counseling process. One of the art therapy that can penetrate cultural boundaries is through
music. Anyone likes music, regardless of age, gender, ethnicity, religion, race, educational background, and
others (Djohan, 2006).

In its application, music therapy is divided into two, namely passive music therapy and active music therapy
(Wigram, Pedersen, & Bonde, 2002). Passive music therapy is the gift of music therapy that is done by inviting
the counselee to listen to a particular instrument carefully. Meanwhile, active music therapy is the process of
giving music therapy is done by inviting the counselee to play an instrument, singing, or creating a song.
These two techniques of music therapy can be done through individual or group counseling.

In the realm of guidance and counseling, group counseling is an interpersonal process led by professionally
trained counselors and conducted with individuals dealing with special developmental problems. It focuses
on the thoughts, feelings, attitudes, values, goals of behavior and individual and group goals as a whole
(Gibson & Mitchell, 2011; Wibowo, 2005).

Wigram, Pedersen, and Bonde (2002) say that the development of music therapy in the world today in practice
has centered largely on Behavior’s theory, which specifically refers to Cognitive Behavior Therapy (CBT).
Recent research on music therapy centered on CBT theory in counseling has been widely used, among them
research conducted by Baker, Gleadhill, and Dingle (2007), Fredenburg and Silverman (2014), Rogers et al.

Based on the theory of Music Therapy based on Cognitive Behavior Therapy (Wigram, Pedersen, & Bonde
2002), a millennials student experiencing academic anxiety is caused by the existence of cognitive distortions
or negative thoughts related to his helplessness or inability in academic terms. Cognitive distortions are
formed from the core beliefs that have settled that is the most basic beliefs about self, the existence of
academically incapacity and helpless beliefs, these beliefs are formed based on experience or events
experienced by individuals. So when individuals experience problems related to academic anxiety, then the
thing that needs to be done is to help the individual structure the negative thoughts back to the more adaptive
thoughts.

Using this technique of passive music therapy and active music therapy centered on CBT, it is expected to help
them realize the negative thoughts that cause it, then evaluate their thoughts, and then explore alternatives to
change negative thoughts about themselves and their environment through listening activity receptive /
passive music with guided imagery and active musical activity through composing, improvising and re-
creating music. Another thing that is not less important than the provision of music therapy is to help the
counselee increase the production of four positive hormones possessed by each individual, namely endorphin,
dopamine, serotonin, and oxytocin (Mucci & Mucci, 2002) that act as the trigger of happiness is expected. The
functions of these four positive hormones can make the body more relaxed, so as to reduce anxiety or stress
experienced by individuals.
The reality in Indonesia, the application and research of music therapy in counseling practice is still rare. Research on the influence of music as a medium of therapy against student academic stress ever done by Rosanty (2014). From the results of these studies, music can be used as an intervention to reduce the academic stress experienced by students. However, this study only proves the use of Mozart music as a passive media of passive academic stress, and has not yet considered the giving of music as a technique of integrative approach that can be integrated into conventional counseling practice. Based on this, it is necessary to conduct further research on the provision of music therapy with passive music therapy and passive music therapy techniques that are integrated with one conventional counseling approach that is CBT, to prove its effectiveness in reducing academic anxiety of millennials students for the undergraduate thesis. The hypothesis is that there are differences in the effectiveness of CBT group counseling with passive music therapy and passive music therapy techniques in reducing the academic anxiety of millennials students for the undergraduate thesis.

2. Method

This study used CBT group counseling with passive music therapy technique and active music therapy as independent variable or treatment, and academic anxiety as dependent variable. CBT group counseling with passive music therapy techniques is a service provided to help group members who exhibit an academic anxiety to the undergraduate thesis, thus helping them to become aware of the anxiety they are experiencing, and then evaluating the anxiety based on their unpleasant past experiences. Furthermore, group members are invited to make peace with their past experiences, and optimize their ability to complete the undergraduate thesis well through receptive / passive listening activity with guided imagery. Meanwhile, CBT group counseling with active music therapy techniques is a service provided to help group members who exhibit academic anxiety, so as to help them be able to realize the negative thoughts that cause it, then evaluate their mind, and then they explore alternatives to change negative thoughts about himself and his environment through active musical activity, ie composing, improvising and re-creating music. Furthermore, academic anxiety is an impulse of thoughts and feelings that are sad in the millennials student, as a result of the feelings of worry associated with the process of preparing the undergraduate thesis. Where in the anxiety there are five indicators, namely patterns of anxiety-engendering mental activity, misdirected attention, physical distress, and appropriate behaviors.

Subject of research in this research is millennials student of BK Unika Atma Jaya which have academic anxiety which is up to high. Research subjects used in this study are 14 millennials students. Selection of this subject using purposive sampling technique (non-random). Selection of research subjects is based on inclusion criteria and based on academic anxiety scale. The subject of the study has been selected based on the academic anxiety scale, the result is used as a pretest. This pretest is done to find out the initial description of the millennials student's academic anxiety condition before being given treatment and then to be compared with posttest and follow-up.

The main instrument used in the study is an academic anxiety scale that researchers develop and refers to the theory of academic anxiety by Ottens (1991). Academic anxiety scale consists of 24 items. In the measuring instrument, the researcher performs the expert validation process (expert judgment) and conducts the instrument test twice. The instrument test results are valid (rxy = 0.536-0.823) with the alpha coefficient of 0.963.

The method used is quasi-experimental with repeated measures. This study used three measurements (pretest, posttest, follow-up). Pretest is in the form of an academic anxiety scale before treatment is given. Meanwhile, treatment provided is CBT group counseling with passive music therapy technique and active music therapy performed as many as 5 meetings in different groups, with meeting frequency once a week, and duration of 100 minutes per meeting. Posttest in the form of instrument data collection given after treatment. The follow-up is a re-submission of the data collection instrument after treatment and is done two weeks after the posttest is given.

The analytical technique used in this study is one-way Analysis of variance (ANOVA) repeated measures using the help of Microsoft Excel 2010 and IBM SPSS for windows 23 program. The purpose of using this analytical technique is to test the hypothesis to know the difference of group counseling effectiveness CBT with passive music therapy and active music therapy techniques based on pretest, posttest, and follow-up data.
3. Results

3.1. CBT Group Counseling with Passive Music Therapy

The collected data (pretest, posttest, follow-up) is tabulated prior to analysis (Table 1. and Figure 1.). The condition of academic anxiety given CBT group counseling with passive music therapy before getting treatment is in high condition. After receiving treatment, the millennials student's academic anxiety level dropped to low, but at the time of follow-up there was a slight increase in academic anxiety.

<table>
<thead>
<tr>
<th>No.</th>
<th>Students</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AMYP</td>
<td>97</td>
<td>45</td>
<td>63</td>
</tr>
<tr>
<td>2.</td>
<td>RC</td>
<td>100</td>
<td>50</td>
<td>43</td>
</tr>
<tr>
<td>3.</td>
<td>MM</td>
<td>95</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td>4.</td>
<td>FAO</td>
<td>92</td>
<td>53</td>
<td>58</td>
</tr>
<tr>
<td>5.</td>
<td>ERC</td>
<td>87</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>6.</td>
<td>TK</td>
<td>90</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>7.</td>
<td>MDA</td>
<td>102</td>
<td>42</td>
<td>47</td>
</tr>
</tbody>
</table>

Based on the pretest result the average level of millennials student academic anxiety is included in the high criterion (M = 94.71, SD = 5.407). After being given treatment in the form of CBT group counseling counseling with passive music therapy technique, millennials student academic anxiety experienced a very drastic decrease at posttest (M = 47.71, SD = 4.386). However, after two weeks of treatment, there was a slight increase in millennials student academic anxiety at follow-up (M = 53.86, SD = 8.295). So from the analysis result (Table 2.) shows that CBT approach group counseling with passive music therapy technique is effective in reducing millennials student academic anxiety (F = 117.505, p <0.01).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>94.71</td>
<td>47.71</td>
<td>53.86</td>
</tr>
<tr>
<td>SD</td>
<td>5.407</td>
<td>4.386</td>
<td>8.295</td>
</tr>
<tr>
<td>F (2,12)</td>
<td>117.505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>&lt;0,01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of comparison analysis (pairwise) also shows the value of the acquisition value on the measurement of academic anxiety (Table 3. and Figure 2.). The magnitude of academic anxiety decreased from the effectiveness of CBT approach counseling with passive music therapy technique on pretest vs posttest (MD =
47.000, SE = 2.795, \ p <0.01). Then, on pretest vs follow-up (MD = 40.857, SE = 4.056, \ p <0.01). On posttest vs. follow-up (MD = -6.143, SE = 3.011, \ p >0.01).

<table>
<thead>
<tr>
<th>No.</th>
<th>Comparisons</th>
<th>MD</th>
<th>SE</th>
<th>\ p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pretest vs Posttest</td>
<td>47.000</td>
<td>2.795</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>2.</td>
<td>Pretest vs Follow-up</td>
<td>40.857</td>
<td>4.056</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>3.</td>
<td>Posttest vs Follow-up</td>
<td>-6.143</td>
<td>3.011</td>
<td>&gt;0.01</td>
</tr>
</tbody>
</table>

Based on the results, it can be concluded that CBT approach group counseling with passive music therapy technique can significantly reduce millennials student academic anxiety of BK Unika Atma Jaya at pretest vs. posttest and pretest vs follow-up, but at posttest vs. follow-up enhancement.

### 3.2. CBT Group Counseling with Active Music Therapy

The collected data (pretest, posttest, follow-up) is tabulated prior to analysis (Table 4. and Figure 3.). The condition of an academic anxiety group given CBT group counseling with active music therapy before getting treatment is in high condition. After getting treatment, the level of millennials student academic anxiety decreased to low, then at the time of follow-up decreased again in academic anxiety.

<table>
<thead>
<tr>
<th>No.</th>
<th>Students</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PA</td>
<td>93</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>2.</td>
<td>ST</td>
<td>99</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>3.</td>
<td>BKK</td>
<td>95</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>4.</td>
<td>SS</td>
<td>92</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>5.</td>
<td>OE</td>
<td>87</td>
<td>44</td>
<td>39</td>
</tr>
<tr>
<td>6.</td>
<td>VOC</td>
<td>93</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>7.</td>
<td>TD</td>
<td>89</td>
<td>40</td>
<td>33</td>
</tr>
</tbody>
</table>
Based on the pretest result the average level of millennials student academic anxiety is included in the high criterion (M = 92.57, SD = 3.910). After being given treatment in the form of CBT approach group counseling with active music therapy technique, millennials student academic anxiety experienced a very drastic decrease during posttest (M = 50.57, SD = 8.619). Then, after two weeks of treatment, there was a decrease in millennials student academic anxiety at follow-up (M = 46.86, SD = 9.616). So from the analysis result (Table 5.) indicate that CBT group counseling with passive music therapy technique is effective in reducing millennials student academic anxiety (F = 213.495, p <0.01).

The result of the comparison analysis (pairwise) also shows the amount of acquisition value on the measurement of academic anxiety (Table 6. and Figure 4.). The magnitude of the academic anxiety decreased from the effectiveness of CBT approach counseling group with active music therapy technique on pretest vs posttest (MD = 42.000, SE = 2.726, p <0.01). Then, on pretest vs follow-up (MD = 45.714, SE = 2.643, p <0.01). On posttest vs follow-up (MD = 3.714, SE = 1.924, p > 0.01).

Based on the results, it can be concluded that CBT approach group counseling with active music therapy technique can significantly reduce millennials student academic anxiety of BK Unika Atma Jaya at pretest vs. posttest, pretest vs follow-up, and posttest vs follow-up.
3.3. Comparison of Effectiveness of CBT Counseling Group with Passive vs Active Music Therapy

Based on the results of ANOVA Repeated Measures test on test of within-subjects effect, it was found that group A (with passive music therapy technique) with $F = 117.505$ and $p = 0.00 < 0.01$, and group B (with active music therapy technique) with $F = 213.495$ and $p = 0.00 < 0.01$. It can be concluded that $H_a$ is accepted and $H_0$ is rejected, so there are significant differences in pretest, posttest and follow-up results of research subjects. The difference is due to the provision of group counseling treatment with CBT approach through passive and active music therapy techniques. The effectiveness difference between CBT counseling with passive and active music therapy techniques in reducing student academic anxiety can be seen in table 7. below:

Table 7. Comparison of Repeated Measures Academic Anxiety of Passive dan Active Music Therapy Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Music Therapy</td>
<td>M</td>
<td>94.71</td>
<td>47.71</td>
<td>53.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>5.407</td>
<td>4.386</td>
<td>8.295</td>
<td></td>
</tr>
<tr>
<td>Active Music Therapy</td>
<td>M</td>
<td>92.57</td>
<td>50.57</td>
<td>46.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>3.910</td>
<td>8.619</td>
<td>9.616</td>
<td></td>
</tr>
</tbody>
</table>

From the comparison plot of academic anxiety of group A and B above, the result of the millennials students' academic anxiety level in group A (with passive music therapy technique) at pretest ($M = 94.71$, $SD = 5.407$) was significantly higher than when posttest ($M = 47.71$, $SD = 4.836$), and at follow-up ($M = 53.86$, $SD = 8.295$), although there was a slight increase in millennials student academic anxiety from posttest to follow-up ($MD = -6.143$, $SE = 3.011$). This finding is in line with $H_a$’s prediction that CBT group counseling with passive music therapy techniques is effective in reducing millennials student academic anxiety. Furthermore, group B (with active music therapy technique) at pretest ($M = 92.57$, $SD = 3.910$) was significantly higher than at posttest ($M = 50.57$, $SD = 8.619$), and at follow-up ($M = 46.86$, $SD = 9.616$). In this group, there was a decrease in millennials student academic anxiety from posttest to follow-up ($MD = 3.714$, $SE = 1.924$). These findings are also in line and answer the prediction of $H_a$ which states that there is a difference of effectiveness level between CBT group counseling with passive music therapy and active music therapy technique toward millennials student academic anxiety in preparing the undergraduate thesis.

Based on table 7. above it can be seen that there are differences in counseling group effectiveness using passive music therapy and active music therapy techniques in reducing millennials student academic anxiety. It can
be known by the value of $z$ on pretest ($z = -0.770$), posttest ($z = -0.512$), and follow-up ($z = -1.407$). Further to see the significant difference in the measurement in this study can be seen in table 8. below.

### Table 8. Pairwise Comparisons Academic Anxiety of Passive and Active Music Therapy Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Comparisons</th>
<th>MD</th>
<th>SE</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Music Therapy</td>
<td>Pretest vs Posttest</td>
<td>47.000</td>
<td>2.795</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Pretest vs Follow-up</td>
<td>40.857</td>
<td>4.056</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Posttest vs Follow-up</td>
<td>-6.143</td>
<td>3.011</td>
<td>.262</td>
</tr>
<tr>
<td></td>
<td>Pretest vs Posttest</td>
<td>42.000</td>
<td>2.726</td>
<td>.000</td>
</tr>
<tr>
<td>Active Music Therapy</td>
<td>Pretest vs Follow-up</td>
<td>45.714</td>
<td>2.643</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Posttest vs Follow-up</td>
<td>3.714</td>
<td>1.924</td>
<td>.305</td>
</tr>
</tbody>
</table>

In table 8, it can be seen that in pretest vs. posttest, passive music therapy ($MD = 47,000$) is more effective for reducing academic anxiety compared with active music therapy ($MD = 42,000$). In pretest vs follow-up, active music therapy ($MD = 45.714$) is more effective for reducing academic anxiety compared with passive music therapy ($MD = 40.857$). Furthermore, in posttest vs. follow-up, active music therapy ($MD = 3.714$) was more effective for reducing academic anxiety compared with passive music therapy with an increase in academic anxiety ($MD = -6.143$) after two weeks of treatment. For more details can be seen in Figure 5. below.

**Figure 5.** The Comparison Reduction Plot of Academic Anxiety group Passive and Active Music Therapy

Based on figure 5. above, it can be seen comparison of CBT group counseling by using passive and active music therapy technique in reducing millennials student academic anxiety. From table 8. and figure 5. it can be seen that CBT group counseling using passive music therapy technique is more effective to reduce academic anxiety at pretest vs. posttest. Meanwhile, in pretest vs follow-up and posttest vs. follow-up, active music therapy is more effective in reducing millennials student academic anxiety compared to passive music therapy.

### 4. Discussion

Based on the results of this study showed that through passive and active music therapy gives a decreasing effect on the symptom academic anxiety of millennials students who are working on thesis. This is also supported by interview results where the decrease in the level of academic anxiety felt by the subjects occurred
Dominikus David Biondi Situmorang, Mulawarman Mulawarman, & Mungin Eddy Wibowo

after attending CBT counseling with passive and active music therapy techniques. The results of this study strongly supports the results of research conducted by Skudrzyk et al. (2014), that the use of music in the counseling process can effectively help individuals understand their emotional and cognitive development. Individuals can listen to songs, or play an active musical instrument. Through music, counselors can make the counseling process more interesting and effective. Similarly, research conducted by Bradley et al. (2014) that through music can help counselors and counselors in reframing ideas, focusing perspectives, emotional externalization, and deepening understanding of an experience or problem.

The use of music in the counseling process has many therapeutic benefits. Gladding (2016) also revealed that one counseling strategy to reduce and overcome emotional anxiety and tension is a relaxation technique through music therapy. Relaxation techniques are effective coping skills to reduce anxiety levels. The existence of music as a medium of therapy is one of the interesting phenomena to be studied and developed. Music is used as a medium to calm, and helps counselees to feel comfortable, so the counseling process becomes more effective (Capuzzi & Gross, 2011; Sharf, 2012; Situmorang, 2017a; 2017b; 2018; White & Davis, 2011).

The findings of this study also further support the findings of other researchers who have proven the effectiveness of integration of music therapy with CBT approach in the counseling process, including Rogers et al. (2007) that explicitly integrate both, as well as Fredenburg and Silverman (2014), Hui-Chi Li et al. (2015), Vargas (2015), Zhang et al. (2017) who implicitly integrate music therapy with the CBT approach. In the group of passive music therapy, this study is able to help the subject of research to realize the anxiety experienced, then the subject of the study can evaluate the anxiety is based on the experience of his past is sad. Furthermore, research subjects are invited to make peace with their past experiences, and optimize their ability to complete the undergraduate thesis well through receptive / passive listening activity with guided imagery (Situmorang, 2018). Meanwhile, in the group of active music therapy, this research can help research subjects to be able to realize the negative thoughts that cause the academic anxiety experienced, then the subject of the study can evaluate the mind that caused the academic anxiety, and subsequently research subjects can explore to change negative thoughts about himself and his environment through active musical activity, ie composing, improvising and re-creating music (Situmorang, 2018).

Scientifically, music can affect the body, mind and emotions, so as to provide calm and peace when increased mental activity while reducing stress due to stress or anxiety (Djohan, 2006). These conditions affect the part of the human brain associated with emotional processes, especially in the hypothalamus (Vianna, Barbosa, Carvalhaes, & Cunha, 2012). An individual who has an anxiety is caused by the high production of the hormone thyroxine in the human brain. A person who undergoes a negative emotional process will stimulate the hypothalamus to produce high levels of thyroxine hormone.

This is what causes the individual easily tired, easily anxious, easy tension, easy fear, and insomnia, so that individual circumstances become less optimal. To cope with that, according to Mucci & Mucci (2002) one must be able to balance themselves in every condition experienced. The human brain has four natural morphine body that is positive hormone that can relieve disease and make life become happy. Morphine is the hormone endorphin, dopamine, serotonin, and oxytocin. The function of the natural morphine-morphine can make the body become more relaxed, so as to reduce anxiety or stress.

Wigram, Pedersen, & Bonde (2002) explain that one of the interventions to increase the production of endorphin and serotonin hormones is by relaxing through listening to music. Psychologically, music has a positive relationship in human life. Music, can make a person more relaxed, reduce stress, create a sense of security and prosperity, increase happiness, and help relieve pain (Djohan, 2006). This is also reinforced by research conducted by Laura, Sylvie, and Aurore (2015) and Zarate (2016) that music can increase the production of endorphin and serotonin hormones that cause an individual to feel happier and reduce anxiety experienced.

The majority of subjects said that after listening to music passively and actively playing the music, the subjects felt more relaxed, calm, peaceful, comfortable, so as not to feel anxious, worried, confused and most importantly that can help and motivate to do undergraduate thesis without procrastination. This is in line with the opinion of Djohan (2006) and the results of research conducted by Bibb, Newton, and Newton (2015),
Fox and McKinney (2015), Gutiérrez and Camarena (2015), Hatice Çiftçi and Öztunç (2015), Lilley, Obercle, and Thompson (2014), Rosanty (2014), Situmorang (2018), who explained that listening and playing music in general can be used to cure stress or anxiety, because music has the power to create a relaxed state in the individual so that this relaxed state causes balance of body metabolism and hormonal.

From the results of the research that has been done on group A (passive music therapy) and group B (active music therapy) to reduce academic anxiety, there is a difference of effectiveness that in pretest vs. posttest, passive music therapy is more effective to reduce academic anxiety compared with active music therapy. In pretest vs follow-up, active music therapy is more effective for reducing academic anxiety compared with passive music therapy. Furthermore, posttest vs. follow-up, active music therapy is more effective for reducing academic anxiety compared with passive music therapy with an increase in academic anxiety after two weeks of treatment. This difference in effectiveness is similar to the results of research conducted by Laura and Aurore (2015) states that active music therapy is more effective in treating anxiety and depression disorders experienced by patients.

This is also similar to the research conducted by Atiwannapat et al. (2016) who stated that the reduction of major depressive disorder symptoms was slightly greater in the active music therapy group compared with the passive music therapy group. In addition, another study conducted by Ilie (2013) showed that the group of participants who played music had a significant decrease in cortisol levels compared with those who just sat in silence (the group that listened to music). However, as expected, participants in the group who listened to the music showed a significant decrease also in cortisol levels although not as big as the group that played the music.

In group A (passive music therapy), all group members dramatically decreased academic anxiety at pretest vs. posttest. However, at the time of pretest vs follow-up, there was only one subject that experienced a very striking change and the other subjects did not experience a decrease, even as an increase in academic anxiety. The most noticeable subjects were RC as one of subject who had decreased levels of academic anxiety quite high at posttest vs follow up. This indicates that the effects of passive music therapy perceived by RC as subject persist for long periods of time, besides being supported also by the intensity of the subjects in listening to music for two weeks three times. According to Berlyne (in Djohan, 2010) one of the related factors when someone listens and plays music is familiarity, so the more often someone listens and plays music, the hedonic value will increase. Meanwhile, in the six other subjects seemed to experience an increase in academic anxiety score during posttest vs. follow-up. This indicates that passive music therapy perceived by the six other subjects did not persist for long periods of time and when viewed from the intensity of listening to music, the six subjects listened to music in quite a few for two weeks.

In contrast, the case with group B (active music therapy), all group members experience dramatically decreased academic anxiety at pretest vs. posttest. However, at the time of pretest vs follow-up, there was only one subject that experienced a significant change and the other subjects did not increase, but also decreased academic anxiety. The most noticeable subjects were BKK as one of subject who experienced an increased level of academic anxiety at posttest vs follow up. This indicates that the effect of active music therapy perceived by BKK as subject can not survive for long periods of time, but it is also supported by the lack of subjects in playing music for two weeks.

According to Berlyne (in Djohan, 2010) one of the related factors when someone listens and plays music is familiarity, so the more often someone listens and plays music, the hedonic value will increase. One subject that did not increase or decrease (stable) during pretest vs follow-up of ST as a subject. This shows that the effect of active music therapy is felt by the subjects in the short term and still lasts long until the follow-up (two weeks). While on the other five subjects seemed to decrease academic anxiety score at posttest vs. follow-up. This shows that active music therapy perceived by the other five subjects not only survives in a short time period and when viewed from the intensity of playing music, the five subjects played music in varying amounts for two weeks.

5. Conclusion

In this research can be concluded that through counseling group approach CBT with passive music therapy technique and active music therapy can effectively reduce academic anxiety millennials student of BK Unika
Atma Jaya. Based on this, the findings of this research can provide a new understanding for the development of psychology and counseling in Indonesia, that the use of conventional counseling approach that is integrated with music therapy has proven effective in reducing academic anxiety of undergraduate thesis. From the results of this study, it is expected that psychologists and counselors in Indonesia can use CBT group counseling with passive music therapy and active music therapy techniques to help millennials students who experience academic anxiety at the time of preparing the undergraduate thesis. Then, it is hoped that the next researcher can test the effectiveness of CBT group counseling with passive music therapy technique and active music therapy with true-experimental design with random assignment in each group to produce two equal groups. In addition, through further research is expected to get different findings in enriching the treasury of psychological science and counseling in accordance with the development of the current era.

References


