Managing Cognitive Anxiety Through Expressive Writing In Student-Athletes

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Abstract: The purpose of this study was designed to examine the effect of expressive writing on cognitive state anxiety on the student-athletes of badminton. This study uses an experimental research method with one group pre and posttest design. The treatment in this study was expressive writing given for 3 consecutive days. The participants of this study were 7 badminton athletes from the East Java Student Education and Training Center. The instrument in this study used cognitive state anxiety. Data were analyzed using the Wilcoxon test and a significance value of 0.042 <0.05 was obtained. Thus it can be said that there is an effect of expressive writing on cognitive state anxiety on badminton student-athletes.

Keywords: Cognitive State Anxiety, Expressive Writing, Badminton, Student-Athletes.

1 Introduction

Danu (2013) explains that the regeneration of badminton athletes in Indonesia is still very slow. Rarely do we hear of young athletes in badminton who won championships in international matches. If we look at the ranking sequence of Badminton World Federation (2015), almost all the names of athletes included in the top 10 in all categories are the big names included in elite athletes. The problem of regeneration in badminton can be overcome by conducting comprehensive training on young athletes in this sport. The guidance referred to not only covers physical and technical but also psychological. The psychological condition of the athlete also needs coaching because it can affect the athlete's appearance when competing. One of the psychological conditions that can affect an athlete's appearance is anxiety[1]. Jannah (2017) defines anxiety as an athlete's feelings about something unpleasant going to happen, such as an athlete performing poorly and losing a match. Anxiety can also be defined as a feeling of fear of failure or defeat (Spielberger in Amir, 2012). The anxiety felt by an athlete before a match is called competitive state anxiety. Competitive state anxiety is a more specific concept regarding sports anxiety, specifically momentary anxiety or state anxiety [2]. Anxiety and trait anxiety is a concept of sports anxiety developed by Charles Spielberger. Jannah (2016) explains that innate anxiety is a predisposition that affects athletes to perceive various situations as something that threatens and causes anxiety. In contrast to innate anxiety which is a predisposition and tends to persist, the intensity of momentary anxiety is more volatile and changes depending on the situation that causes the anxiety (LeUnes and Nation, 2002). Martens, Vealey, and Burton (1990) said that a situation that can cause anxiety is a situation that has the possibility of failure that can threaten the self-esteem of athletes. Anxiety has two components in it, namely somatic and cognitive, which have different effects on athletes (Jannah, 2016). The cognitive component of anxiety almost always has a negative effect on athlete performance when compared to the component somatic of anxiety[3]. The component somatic of anxiety is called somatic anxiety and the cognitive component of anxiety is called cognitive anxiety. Athlete negative thoughts that are examples of cognitive state anxiety include feelings of loss and depressed because of superior opponents (Morris, Davis, and Hutchings [4]. Another difference between the components somatic and cognitive in anxiety lies in its intensity, the intensity of the somatic state anxiety will peak when the athlete enters the competition arena and decreases as the athlete begins to adapt to the match situation, while the intensity of cognitive state anxiety will increase gradually over the several days leading up to the match (Martens, Vealey, and Burton (1990). Furthermore, Martens, Vealey, and Burton (1990) explained that compared to somatic state anxiety, cognitive state anxiety tends to be more stable and difficult to change in intensity unless intervened using mental or psychological training techniques. is expressive writing. Expressive writing is a technique that asks someone to write down their thoughts and feelings about the pressures that have been or are being faced[5]. The situation of the match can be perceived as something that is pressing for the athlete and causes anxiety [6]. One component of anxiety felt by athletes is cognitive state anxiety which can be intervened using expressive writing because expressive writing can free negative thoughts and feelings that are being felt by someone [7], gain insight (insight) about feelings and his thoughts [8], and help clear his negative thoughts and feelings [9].

Based on the description above, this study intends to examine the contribution of methods expressive writing to cognitive state anxiety in badminton athletes. Cognitive state anxiety is a cognitive component of competitive state anxiety that can affect athlete performance[10]. Expressive writing is a technique that asks someone to write down their thoughts and feelings about the pressures that have been or are being faced[11].
2 Literature Review

2.1 Expressive Writing
Pennebaker (2012) states that expressive writing is a technique that asks individuals to write their thoughts and feelings freely, especially regarding the pressures they have or are facing. Through expressive writing, individuals will get insights into their feelings and thought [12]. The purpose of expressive writing is to free negative feelings and thoughts felt by individuals [13]. Expressive writing is applied in various settings. In sports, Serena Williams (tennis athlete), also feels the benefits of expressive writing. Serena Williams, who has a journal containing her writings related to her thoughts and feelings, said that writing can help clear her thoughts and negative emotions [14][15].

2.2 Cognitive Anxiety
Anxiety has two components, cognitive and somatic anxiety. Somatic anxiety is a physiological and physical component of anxiety, while cognitive anxiety is a cognitive component of anxiety [16]. Mellalieu, Hanton, and Fletcher (2009) explain cognitive anxiety is an element or cognitive component of anxiety. Negative thoughts such as feeling defeated, worrying about the judgment of the trainer and/or audience, depressed because of opponents' superior, distress emotional, are some examples of cognitive anxiety. Another example is concerns and negative thoughts that the process and outcome of competition can threaten the athlete's position [17]. Chart 2 Linkages of Types of Sports Anxiety Although somatic anxiety and cognitive anxiety are one unit, the intensity and influence of the two are not always the same. It could be that somatic anxiety felt by an athlete is higher than cognitive anxiety. Vice versa. an athlete can have level cognitive anxiety higher than the components somatic anxiety [18]. Jannah (2016) explains that somatic anxiety and cognitive anxiety have effects differentiation on an athlete. Smith and Sarason (1993) explain that cognitive anxiety or the cognitive aspects of anxiety have the greatest influence on an athlete's performance because cognitive anxiety always negatively impacts an athlete's performance. Martens, Vealey, and Burton (1990) add that the intensity of cognitive anxiety will increase gradually as the game approaches. The level of cognitive anxiety began to increase several days before the competition began [19]. Cognitive anxiety also tends to be stable and difficult to change or disappear unless athletes do certain mental training techniques.

3 Methods
This research was conducted with an experimental method. The experimental design used in this study is one group pre and posttest design. In this design, intervention or treatment is imposed on one experimental group that is subjected to two measurements of the dependent variable, namely before and after the application of the treatment [20].

Research Subject
The subjects of this study are athletes Education Center and East Java Student Training (PPLP) All subjects were aged between 14-18 years old During the research process, there were 1 athlete who did not attend one of the treatment sessions and posttest so that the data could not be used, so there were a total of 7 subjects from the initial number athletes

Instrument
Instruments used in research there are two, namely the measurement scale cognitive state anxiety. Scale Measurement of Cognitive State Anxiety. Measurement cognitive state anxiety is carried out using an adaptation of Competitive State Anxiety Inventory-2 (CSAI-2) developed by Martens, Burton, Vealey, Smith, and Bump (in Cox, 2002). CSAI-2 consists of 27 statement items divided into 3 subscales, namely cognitive state anxiety, somatic state anxiety, and state self-confidence [21]. Each subscale consists of 9 statement items and response choices using a 4 scale format from Likert [22]. The three subscales in CSAI-2 were calculated and analyzed separately and this study only used the subscale cognitive state anxiety to measure the cognitive state anxiety of the study subjects. Before the measurement instruments are used, CSAI-2 is adapted first by translating the item into Indonesian and conducting a readability test on a sports psychologist and a badminton athlete who has similar characteristics to the research subjects. After the adaptation process is carried out, the next is to test the validity and reliability. Validity test is done with construct validity and the results obtained are 2 dead items and 7 valid items. The reliability test uses an internal consistency approach with computational technique Cronbach's alpha which obtained a reliability coefficient of 0.762.

Training module expressive writing
Training expressive writing in this study is based on the procedure expressive writing of Pennebaker's and Chung (in the process of publishing). The treatment was given for 3 consecutive days and each session was carried out for 15 minutes. Expressive writing can be done in two ways, namely by handwriting or typing in gadgets [23]. Research subjects were given the freedom to choose which method, but all chose to write hand. The instructions used in this study were modified from the original instructions from Pennebaker, not only in language but also more specifically in selected topics in the form of anxiety. The instructions in question are: “Over the next few days, I will ask you to write down the anxiety that you feel because of the match that you will soon be participating in. In this article, you will explore your deepest thoughts and feelings. You might connect that anxiety with your relationship with other people, such as coaches, other athletes, parents, friends, your opponents, and so on. You might also relate it to events in the past, present, or your hopes for the future. Or who you were, what you want to be in the future, or who you are now. You might write about the same thing or different over the next few days. No one has only 1 conflict. You can write it all down. All your writing will be kept strictly confidential. Don't think about spelling, sentence structure, or grammar. The only rule is that once you write, you must continue to do so until the time limit runs out” The whole procedure training expressive writing and the data used in the validity and reliability tests are tested on other
subjects with similar characteristics, namely badminton athletes in PB Hi -Qua Wima Surabaya.

Data analysis techniques
Data were analyzed using a hypothesis test in the form of the Wilcoxon test.

4 RESULT
The table below shows descriptive statistics from the results of data collection:

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Table above shows that there was decrease in scores between pretest and posttest. After the descriptive statistics are analyzed, then the hypothesis test is performed using the Wilcoxon test. The data used are the results of the pretest and posttest of the research subjects. Through these statistical calculations, a significance value of 0.042 <0.05 was obtained. This value indicates that there is a difference between the pretest and posttest of research subjects so that it can be said that there is an effect of expressive writing on cognitive state anxiety.

5 DISCUSSION
Based on the hypothesis test, it is known that there is an effect of expressive writing on cognitive state anxiety in badminton athletes. The results of this study are consistent with the studies of Scott, et al. (2003) and Hudson and Day (2012) who found that expressive writing has positive benefits on the psychological condition of athletes[24]. This study is also following the results of research by Park, et al. (2014) and the opinion of Pennebaker (2012) that expressive writing is useful in reducing the intensity of anxiety felt by someone. The effect of expressive writing on cognitive state anxiety can occur because of the theoretical linkages between the two concepts[25]. Park, Ramirez, and Beilock (2014) explain that expressive writing is a technique that asks someone to write down their thoughts and feelings about the pressures that have been or are being faced. Activities expressive writing can relieve negative feelings and thoughts perceived by gaining an understanding of the feelings and thoughts. Kent (2014) also explains that doing expressive writing can help someone clear up negative thoughts and feelings that are being felt. Therefore, by doing expressive writing, athletes can free and clear their negative thoughts about matches where negative thoughts are part of cognitive state anxiety.

CONCLUSIONS
Based on the results and discussion it can be concluded that method training expressive writing has contributed to the decrease in cognitive state anxiety of badminton athletes. Even so, the results of this study have several limitations. The first limitation is related to the generalization of research results. This study uses a small number of subjects so that the results of the study only apply to research subjects and cannot be generalized to a wider population. The second limit relates to the control of the internal validity of the experiment, namely history. Many events outside the research occur at the time interval between the pretest and posttest, some of which can affect the results of the study. The events referred to for example: tell anxiety felt to others, both directly and through a status on social media, or do other mental exercises that have been mastered by the subject outside of the time the treatment was given. Therefore, further research is needed in the future by using a greater number of subjects and tighter control over the threat of internal validity of the experiment.

REFERENCES


