Pre-Competition Anxiety Levels Among Rahim Kajai College Athletes in Intercollegiate Sports Competitions
(*Tahap Kebimbangan Pra Pertandingan Sukan Dalam Kalangan Atlet Kolej Rahim Kajai Dalam Pertandingan Sukan Antara Kolej Kediaman*)

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ABSTRACT

This study was conducted to identify the level of anxiety of Kolej Rahim Kajai (KRJ) athletes before the residential college sports competition. A total of 144 athletes consisting of 78 male athletes and 66 female athletes were randomly selected using probability sampling to answer a questionnaire. The 'Competitive State Anxiety Inventory-2' (CSAI-2) questionnaire which was created by Cox & Russel (2003) was used to see the level of anxiety before a sports competition involving three aspects, namely cognitive anxiety, somatic anxiety, and self-confidence. The mean score and standard deviation are consulted to find out whether the interpretation is at a low, medium, or high level. The results of this study found that UKM KRJ athletes have a high level of cognitive anxiety (M=3.00, SP=0.41), moderate somatic anxiety (M=2.40, SP=0.77), and a moderate level of self-confidence (M=2.90, SP=0.32) before the competition. The results of the t-test showed that there was no significant difference in the level of cognitive anxiety (p=0.321), the level of somatic anxiety (p=0.220), and self-confidence (p=0.254) between genders. The study also found that there was no significant difference in the level of cognitive anxiety (p=0.813), the level of somatic anxiety (p=0.60), and self-confidence (p=0.29) between individual and group sports. The results of this study can be used as a guide to plan training for KRJ athletes in order to improve their performance during competitions in the future. This study also suggests training needed to deal with pre-competition anxiety and lack of self-confidence.

Keywords: Cognitive, somatic, anxiety, sports, competitions, athletes, colleges.

ABSTRAK

Kajian ini dijalankan bertujuan untuk mengenal pasti tahap kebimbangan atlet Kolej Rahim Kajai (KRJ) sebelum pertandingan sukan kolej kediaman. Seramai 144 orang atlet yang terdiri daripada 78 orang atlet lelaki dan 66 orang atlet perempuan dipilih secara rawak (pensampelan Kebarangkalian) untuk menjawab borang soal. Soal selidik 'Competitive State Anxiety Inventory-2' (CSAI-2) yang telah dibuat oleh Cox & Russel (2003) digunakan bagi melihat tahap kebimbangan sebelum pertandingan sukan yang melibatkan tiga aspek iaitu kebimbangan kognitif, kebimbangan somatik dan keyakinan diri. Skor min dan sisihan piawaian dirujuk bagi mengetahui interprestasi sama ada dalam tahap rendah, sederhana atau tinggi. Keputusan kajian ini mendapati bahawa atlet KRJ UKM mempunyai tahap kebimbangan Kognitif yang tinggi (M=3.00, SP=0.41), Somatik) yang sederhana (M=2.40, SP=0.77) dan tahap keyakinan diri juga sederhana (M=2.90, SP=0.32) sebelum pertandingan. Keputusan Ujian t menunjukkan tidak terdapat perbezaan yang signifikan bagi tahap kebimbangan kognitif (p=0.321), tahap kebimbangan somatik (p=0.220) dan keyakinan diri (p=0.254) antara jantina. Kajian turut mendapati tidak terdapat perbezaan yang signifikan tahap kebimbangan kognitif (p=0.813), tahap kebimbangan somatik (p=0.60) dan keyakinan diri (p=0.29) untuk antara sukan individu dan berkumpulan. Hasil kajian ini boleh dijadikan sebagai panduan untuk merancang latihan bagi atlet KRJ agar dapat mempertingkatkan prestasi semasa pertandingan pada masa akan datang. Kajian ini turut mencadangkan latihan yang diperlukan bagi menghadapi kebimbangan pra pertandingan dan kekurangan keyakinan diri.

Kata Kunci : Kognitif, somatik, kebimbangan, sukan, pertandingan, atlet, kolej.

INTRODUCTION

An annual competition for students is held at Universiti Kebangsaan Malaysia called Inter-Residential College Sports. A team to play on will be provided by each residential college. Students place a high value on athletics because they can not only enhance their health but also boost the university's reputation. However, residential college athletes frequently face anxiety when participating in any sport, particularly right before the competition they would be competing in, to the point where it affects their performance. This is so because the majority of them don't practise sports on a regular basis and lack specialised training.

Anxiety issues during competition frequently disrupt athletes' feelings. This risk applies to all athletes, regardless of age. Anxiety is one of the factors that might impair athletes' performance in sports, and there must be specific causes that cause a person to feel concerned and worried. Failing to act correctly at vital times is frequently the reason for an athlete's downfall. Failure to take the appropriate action is most frequently caused by tension and worry, which causes the athlete to be unable to focus and think clearly and thoroughly before making a decision while competing. As a result, actions performed under duress frequently backfire on the athletes involved.

Similarly, these issues differ between genders. According to a study conducted by Parnabas et al. (2016), female athletes reported more sources of anxiety than male athletes. This indicates that the level of anxiety among female and male athletes differs. Female athletes will be less successful in displaying good performance during competition as a result of this. Furthermore, these issues differ between athletes who participate in individual sports and those who participate in team sports. Ichraf (2013) discovered that anxiety levels are higher in team sports athletes than in individual sports athletes in his study.

This is because every participant in a team sport is concerned that their performance will lead their team to acquire an unfavourable impression and fears being criticised and not trusted by their colleagues. Many characteristics, such as gender or sport type, appear to influence the dimensions of competitive anxiety (Martens, Vealey, & Burton, 1990). Some competitive anxiety research efforts have focused on detecting interpersonal characteristics in order to build tailored therapies for athletes. However, inconsistent findings have been discovered for these variables.

According to Levitt (1980), anxiety is induced by physiological arousal and stress caused by the individual's negative interpretation. Levitt divides anxiety into two categories: trait anxiety, which refers to individual personality features, and state anxiety, which refers to the individual's current level of anxiety as a result of his perception of the type of stress in his environment at the time. Similarly, when an athlete does not fully understand the skills in a game, anxiety, fear, stress, worry, and thunder will occur before, during, and after a tournament (Fauzee, 2009). This is related to the feeling of anxiety, which is a neutral trait that exists in all persons regardless of whether the athlete is experienced or not. Previous studies have found that more than half of competitors at the Olympic Games or sporting events had stress or anxiety issues (Murphy, 1988).

Anxiety is a negative feeling that impacts perception in sports competitions, and the majority of athletes see anxiety as impeding performance, which can lead to decreased performance (Weinberg and Gould, 1999; Raglin and Hanin, 2002). Furthermore, the majority of athletes who seek counselling do so because they are anxious both before and during sporting activities (Bull, 2000). Athletes' performance in sports will suffer if they are unable to regulate their nervousness (Martens et al., 1990). Anxiety is the leading cause of decreased performance and athlete dropout from sports (Pierce, 1980; Martens et al., 1990; LeUnes and Nation, 2002). Additionally, athletic violence is linked to higher levels of anxiety (Berkowitz, 1990). Athletes also use medicines to alleviate anxiety in order to perform better (Weinberg and Gould, 1999).

According to the "inverted U" theory, there is a threshold point at which athletic performance improves as arousal levels rise. The performance will deteriorate with any arousal level above the threshold. Performance quality suffers at low arousal levels. Performance quality suffers at low arousal levels. A top tennis player playing a player with a lower ranking might feel this, which is referred to as under-arousal or boredom. Sport performance peaks at medium levels of arousal. This is referred to as optimal arousal and may be felt when a boxer enters the proper mental or physical "zone" to perform at their peak. Performance quality declines at high arousal levels. When a football team is down 3-0, this can be described as panic, which may help to explain why a player performs so poorly. Sometimes adjustments to arousal levels are necessary during the same performance. In rugby, a fly half needs to be more alert when making a big hit than when taking a penalty shot, when calmness would be advantageous.

The level of pre-competition anxiety is unknown due to inconsistent data, according to Hanton, O'Brien, and Mellaieu (2003). Various athletes have reported varying degrees of anxiety, ranging from
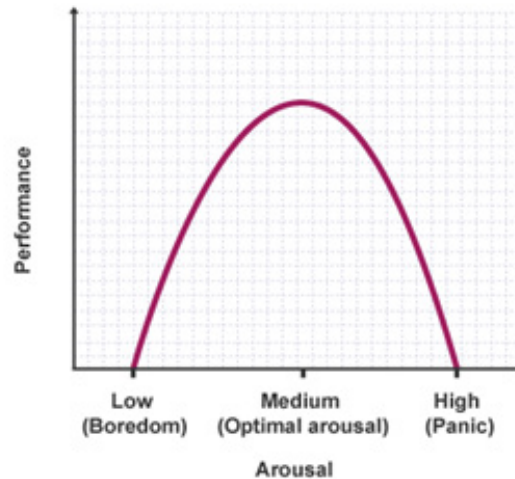
DIAGRAM 1. Inverted 'U' Theory (Yerkes& Dodson,1908).

severe to little (Raglin and Hanin, 2000). Meanwhile, Males and Kerr (1996) discovered that the amount of anxiousness gradually grows as the sporting event approaches. This is related to the inclination to think negatively when the event of a sporting competition approaches (Elgin, 2006). Furthermore, the athlete's skill was found to influence the athlete's level of anxiousness (Hembree, 1988; Heckhausen, 1990; Jones, 1995). Athletes of various ability levels have been observed to have varying amounts of anxiety before and during the competition (Mahoney and Meyers, 1989; Cox et al., 1993). Athletes with better skill levels were reported to have lower anxiety levels (Sade, Bar-Eli, Bresler and Tenenbaum, 1990). Perry and Williams (1998), on the other hand, discovered that the study's findings on the level of anxiety among high, medium, and low-skill athletes were not significant.

As a result, sports scientists labour tirelessly to increase athletic performance. They are always looking for new training ideas and strategies to give specific training for athletes to achieve high levels of performance. All of these studies demonstrated that physical ability alone is insufficient for sports performance, and psychological capacity is also significant (Akarçeşme, Koruç, and Ylmaz, 2004). What is lacking in this area of concern in athletics is athlete awareness and aid. This is a rarely discussed topic, and there are few resources accessible expressly for athletes that compete in any sport.

If these resources are available, athletes must be informed and aware. If athletes are helped and awareness is raised about this issue, people who are battling with anxiety in their sport will feel supported and will know they are not alone. Jones and Hardy (1990) explained stress through the model of stress in sports, as seen below:
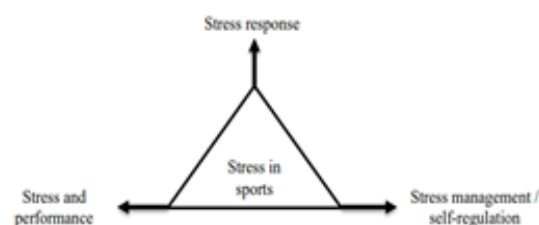

DIAGRAM 2. Stress Model (Jones & Hardy,1990)

Burton established the multivariate Theory of Anxiety in the year 1988. This theory builds on the concept of the Inverted U hypothesis theory (cognitive and physiological factors). Many surveys based on the multidimensional Theory of Anxiety have previously been developed to assess the properties of multidimensional state and trait anxiety. The feature of multidimensional anxiety was divided into three broad concepts: cognitive anxiety, self-confidence, and somatic anxiety. Cognitive anxiety is a mental component generated by the dread of unfavourable self-evaluation and harm to one's self-esteem. The relationship between a person's feeling of confidence and the outcome of their performance is referred to as self-confidence.

Somatic anxiety is a physiological element of environmental anxiety that is directly tied to physiological arousal (Martens et al. 1990). Physiological responses include a rise in heart rate, increased pace of breathing, sweating on the palm of the hand, an uncomfortable feeling in the stomach, and muscle tightness. Consequently, in order to determine pre-competition anxiety among Rahim Kajai College (Athletes, the Multidimensional Theory of Anxiety would be the fundamental theory in this study. They will also have fewer unpleasant experiences with their sports competitions as a result of this assistance. Similarly, if assistance is provided, their academic performance and personal lives may not be harmed. Further research on the types of resources accessible to student-athletes suffering from sports-related anxiety is needed.

The time leading up to a sporting event or competition is known as "pre-competition," and it is during this time that athletes participate in a wide range of activities and techniques to get themselves ready for the task ahead. as reported by Miller (2015). Methods for calming pre-game anxieties and maximising mental preparedness, such as positive self-talk, deep breathing, and visualisation, should be established. Preparation for a competition is done so that the athlete feels more comfortable and performs better on the day of the competition. Depending on the sport and the particular needs of the player or team, pre-competition activities can be timed differently.

However, the following is a basic schedule that many athletes adhere to for pre-competition preparation, including several weeks to months beforehand, a few weeks beforehand, one to two weeks beforehand, a few days beforehand, and the day before the competition. It is vital to keep in mind that this schedule is only a basic suggestion and may change depending on personal preferences, coaching techniques, and the particulars of the competition. Athletes must collaborate closely with their coaches and trainers to customise their pre-competition regimens to meet their individual needs.

As a result, the purpose of this study is to determine the amount of anxiety and the differences in cognitive anxiety, outward anxiety, and self-confidence prior to pre-competition based on gender and sport type.

METHODOLOGY

This is a descriptive and inferential study with a quantitative non-experimental design. A descriptive study was conducted to determine the demographic information of the respondents, and an inferential study would be performed to compare demographic traits. A total of 230 Rahim Kajai College athletes from probability sampling participated in the study. According to Krejcie and Morgan (1970), the respondent sample size is 144 people. This questionnaire is broken into two sections: demographics and a pre-competition anxiety level questionnaire based on the CSAI-2 (Competitive Sport Anxiety Inventory - 2). Cognitive anxiety (cognitive), outward anxiety (somatic), and self-confidence are the three dimensions of the CSAI-2. Each dimension contains nine questions about the level of anxiety before the competition.

The data was examined using the parametric test method, and all obtained data were analysed using the Statistical Package for Social Sciences (SPSS) Version 27 software. The internal consistency test method achieved an alpha value of 0.75 to 0.85 in both the pilot and actual studies. According to Sekaran (2003), the reliability of questionnaire items is determined by the height of the alpha value, which is regarded as high and acceptable if it surpasses 0.60. For the purposes of instrument validity, both instruments have been examined for content validity and idea validity. The data were analysed using the t-test and one-way analysis of variance (ANOVA). Data was collected from responders within one hour of the commencement of their first competition.

RESULT AND DISCUSSION

Demographics

This study included 144 athletes who competed in the Inter-College Sports Championship (SUKEM) at UKM's Rahim Kajai Residential College. According to Table 1, there were 78 male athletes (54.2%) and 66 female athletes (45.8%). Respondents range in age from 19 to 23 years, with a total of 108 (75.0%), and

from 24 to 28 years, with a total of 36 (25.0%). A total of 70 people (48.6%) are in their second year of study among those who have responded. 30 participants (20.8%) responded in the second and third years of the study. In the meantime, there were 14 first-year responses (9.7%). Individual sports activities were represented by 76 individuals (52.8%) and team sports were represented by 68 people (47.2%), according to the type of sport.

TABLE 1. Respondent Demographic Characteristics

Variable		Frequency (n)	Percentage (%)
Sex	Male	78	54.2
	Female	66	45.8
Age	19-23	108	75.0
	24-28	36	25.0
Years of study	1	14	9.7%
	2	70	48.6%
	3	30	20.8%
	4	30	20.8%
Sports	Individual	76	52.8%
	Team	68	47.2%

Levels of Athletes' Cognitive Anxiety, Somatic Anxiety, and Self-Confidence.

Based on Table 2, it was found that the level of cognitive anxiety of athletes before the competition was at a moderate level (M=2.97, SD=0.73) but there were three questions that were at a high level namely 'I am worried about showing a bad performance', 'I am worried others will be disappointed with my performance' and 'I'm worried that I won't be able to concentrate'. The level of somatic anxiety of athletes prior to competition is moderate (M=2.38, SD=1.06), however, there is one question that is low ('My hands are sweaty'). While the athlete's degree of self-confidence before the competition is moderate (M=2.29, SD=0.57), two questions are at a high level, specifically 'I am confident that I will meet the challenge' and 'I am confident that I can handle the pressure'.

TABLE 2. Levels of Cognitive Anxiety, Somatic Anxiety, and Self-Confidence.

Anxiety	N	M	SD	Level
Cognitive	144	2.97	0.73	Moderate
Somatic	144	2.38	1.06	Moderate
Self-Confident	144	2.29	0.57	Moderate

Gender Differences in Pre-Competition Measures of Cognitive Anxiety, Somatic Anxiety, and Self-Confidence.

Table 3 reveals that there is no significant difference in pre-competition cognitive anxiety based on gender. This is supported by the t-test, which reveals a significant result of p>0.05, p=0.321. There was also no significant difference in the level of somatic anxiety before the competition based on gender. This is supported by the t-test, which reveals a significant result of p>0.05, p=0.220. Table 3 further reveals that there is no substantial variation in pre-competition confidence levels based on gender. This is supported by the t-test, which reveals a significant result of p>0.05, p=0.254.

TABLE 3. Gender Differences in Pre-Competition Cognitive Anxiety, Somatic Anxiety, and Self-Confidence

Variable		t-value	SD	Significant	Mean Diff.
Cognitive	Male Female	0.996	142	0.321	0.07
Somatic	Male Female	1.232	142	0.220	0.16
Self-Confident	Male Female	-1.145	142	0.254	-0.0613

Differences in Levels of Cognitive Anxiety, Somatic Anxiety, and Confidence Depending on Sport Type.

Table 4 reveals that there is no substantial variation in pre-competition cognitive anxiety based on sport type. This is supported by the t-test, which reveals a significant result of $p>0.05$, $p=0.813$. There was also no significant difference in the level of somatic anxiety during the pre-competition dependent on the sport. This is supported by the t-test, which reveals a significant value of $p>0.05$, $p=0.60$. Table 3 further demonstrates that there is no substantial variation in pre-competition confidence dependent on the type of sport. This is demonstrated by the t-test, which reveals a significant result of $p>0.05$, $p=0.29$.

TABLE 4. Comparison of Pre-Competition Levels of Cognitive Anxiety, Somatic Anxiety and Self-Confidence Depending on Sport Type.

Variable		t-value	SD	Significant
Cognitive	Individual Sports Team Sports	0.237	142	0.813
Somatic	Individual Sports Team Sports	0.6	142	0.60
Self-Confident	Individual Sports Team Sports	1.1	142	0.29

Cognitive and somatic pre-competition anxiety and self-confidence levels of UKM Rahim Kajai Residential College Athletes were moderate. The Yerkes-Dodson law (Cohen, 2011) is a mathematical model that describes the relationship between stress and task performance. It suggests that to achieve peak performance with an intermediate level of stress or arousal. Poor performance is caused by either too little or too much excitement. The result showed that gender has no effect on cognitive and somatic anxiety and self-confidence in UKM Rahim Kajai Residential College Athletes. This is contradicted by previous researcher Ichraf et al. (2013) who stated that male athletes promote higher self-confidence than female athletes. Female athletes showed higher levels of competitive trait anxiety and anxieties (Kristjánsdóttir, et al, 2018), whereas males reported greater concentration disruption (Grossbard, et al, 2009).

This is consistent with prior research on gender effects on competitive anxiety (Jones & Cale, 1989; Martens et al., 1990), although it contradicts other findings (Perry & Williams, 1989; Hanton, et al, 2008). According to a study of Portuguese athletes, female athletes had higher levels of cognitive and somatic anxiety than male athletes (Dias, Cruz, & Fonseca, 2010). Ramis, et al (2015) discovered only a significant effect for worry, with females having somewhat higher means than males.

In terms of the type of sport differences, the result showed that gender has no effect on cognitive and

somatic anxiety and self-confidence in UKM Rahim Kajai Residential College Athletes. This contradicts prior studies indicating that athletes participating in solitary sports have higher levels of cognitive distress than athletes participating in team sports (e.g., Martens et al. 1990). Dias et al. (2010) discovered that athletes in individual sports reported higher levels of worry and physical anxiety, which is not consistent with our findings. Ichraf (2013) discovered that anxiety levels are higher in team sports athletes than in individual sports athletes in his study.

They conclude that every participant in a team sport is concerned that their performance will lead their team to acquire an unfavourable impression and fear being criticised and not trusted by their colleagues. Nevertheless, this study's results are consistent with prior research (O'Donoghue & Neil, 2015; Hanton, et al., 2008) that discovered no changes in competitive anxiety among participants in individual and team sports in their study.

CONCLUSION

Anxiety is necessary for competition, However, when anxiety becomes too high, or even too low, performance can suffer. The inverted "U" theory proposes that there is an optimal level of anxiety and that when that level is too low or too high, performance suffers. This theory also proposes that as arousal levels rise, athletic performance improves, but there is a limit. Any increase in arousal above the threshold will impair performance. Performance quality suffers when arousal levels are low. According to the drive theory, high performance and high anxiety go hand in hand, which means that higher anxiety leads to better performance.

The Smith and Smoll model holds that anxiety can influence stress responses to a competitive situation, which in turn will influence performance in a multidimensional way (physiologically, behaviourally, and/or mentally/cognitively). There are several self-guided methods that may help UKM Rahim Kajai Residential College Athletes minimise the issue depending on the severity of anxiety and how it affects both performance and daily life. Positive self-talk has been shown in studies to improve athletic performance. Positive phrases can help to replace negative thoughts and the dread that comes with anxiety. Creating a "mantra" is a popular long-distance running strategy that involves repeating a simple phrase such as "one mile at a time" during training and on competition day. Athletes can benefit greatly from visualization. This can be accomplished on your own or with the assistance of self-guided mindfulness-based apps. Deep breathing, also known as diaphragmatic breathing, entails diaphragmatic contraction, belly expansion, and deep inhales and exhales.

Self-confidence influences how athletes perform, whether they are good or bad. Self-confidence may come naturally to some athletes, but it may be something they struggle with throughout their athletic careers. Some athletes perform better than others as a result of this. The belief that you can successfully perform a desired behaviour is defined as self-confidence. Athletes who allow even the smallest amount of self-doubt into their thinking will almost certainly see a drop in performance. Self-confidence can make or break an athlete's performance because it improves concentration, influences goals, and increases effort, among other things. All of these are important aspects of performing well, and they are all the result of increased self-confidence. The use of an Imagery Training Program (ITP) can boost player and coach confidence. This theoretic imaginary technique, like physical practise, innervates the motor complex to practically calibrate our movement patterns for efficient performance. Munroe- Essentially, imagery boosts confidence by preparing the mind for situations through visualisation and exercising our brains through mental simulation. The main characteristics of imagery are heavily emphasised. Modality (feel, smell, hearing, and so on), perspective, angle, agency (one's own or another's), and deliberation are examples of these (degree of deliberate or spontaneous). The more effectively we can implement these characteristics, the better.

Furthermore, goal setting and goal mapping are extremely beneficial in keeping the athlete fuelled with confidence and efficacy. This means that having your athletes concentrate on performance and process goals is more beneficial than concentrating on outcome goals. According to research and interviews with both coaches and athletes, the emphasis should be on performance and process goals rather than outcome goals, because the former provides a greater sense of control and enhanced attention to the task Small, attainable goals must be established in order for athletes to "gain momentum" towards their ultimate goal.

Future research should consider integrating qualitative and quantitative methodologies to have a more complete and nuanced grasp of the subject at hand. The precise pairing and use of qualitative and quantitative methodologies will depend on the study issue, context, and available resources, it should be noted. Future investigators should carefully plan their investigations, consult with established investigators

or methodological authorities, and adhere to accepted standards for doing mixed-methods research. Increasing the sample size is unquestionably a crucial factor to take into account for future research that intends to integrate qualitative and quantitative methodologies. A bigger sample size can improve the study's generalizability and statistical power, producing more solid and trustworthy results. Future researchers can improve the validity and generalizability of their results by expanding the sample size, resulting in a deeper comprehension of the research issue.

APPRECIATION

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