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Comparison of Mood State Between Team Sports and Individual Sports among Middle Aged Female Athletes

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Abstract: The aim of this study was to compare the mood state between team sports and individualsports among middle aged female athletes. A total number of 289 (n=289) middle aged female athleteswho participated in National Masters championship 2019 competition were recruited in the present study.The participants were asked to answer the Brunel of Mood Scale (BRUMS) one hour prior to thecompetition. Mann-Whitney Test were used to compare the mood state between team and individualsports among middle age female athletes. Result showed that there was a significant difference betweenteam and individual sports on anger (p=.001), confusion (p=.048) and vigor (p=.001), while there is nosignificant difference on depression (p=.067), fatigue (p=.732) and tension (p=.195) among middle agedfemale athletes. Anger is significantly higher in Individual sports as compared to team sports, Teamsports shown significantly lower level of confusion as compared to individual sports, whereas vigor issignificantly higher in individual sports as compared to team sports.

Keywords: mood state, team sports, individual sports, middle aged female athletes, National Masters championship, Brunel of Mood Scale, anger, confusion, vigor, depression, fatigue, tension

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INTRODUCTION

Sport is regarded as a primary activity that requires the body to perform a variety of specialised and physically taxing tasks (Harikrishnna&Chittibabu, 2014). It is usually believed that top performance sports necessitate the best psychological conditions in addition to the best physical characteristics. According to Bompa's (2009) training pyramid, an athlete's mental health is one of the key components in preparing an athlete.

Physical activity promotes endorphin production, increases feelings of happiness and satisfaction, and promotes happy and healthy mood states, hence sports and suitable mood states are frequently related (Sungwoon&Jinfu, 2007). As a result, improving physical performance requires both physical and psychological training.

In order to educate athletes ways to modulate mood states for competition, Terry (1995) claimed that maintaining a functioning mood profile when training and competing in challenging environmental settings is necessary. This is a fundamental role of applied sport psychology. As a consequence, sportsmen are better able to focus and come up with original solutions for difficult sporting conditions. One of the key determinants of performance success is the capacity to keep the best and most appropriate mindset before to the competition.

The initial emotional episode, or "happening of an emotion," was characterised by Russell and Barrett (1999) as a complicated web of related little incidents centred around a single item. Weiss and Cropanzano (1996) defined mood as sensations that frequently (but not always) lack a contextual cue and tend to be less powerful than emotion.

Mood is a pioneer indicator to evaluate emotions which broaderly influence performance during exercise, training or competition (Berger & Motl, 2000). A mood state is described as a collection of fleeting emotions that can range in strength and duration while also typically including more than one emotion (Lane & Terry, 2000).

Positive and negative mood dimensions comprise the two types of mood (Terry, Dinsdale, Karageorghis, Lane, 2006). Vigor sometimes referred to as sensations of enthusiasm, alertness, and physical vitality, is a component of a happy mood (Anshel, Heywood, Fredson, Horvart, Jozef & Sharon, 1990). The negative moods were intended to include anxiety, sadness, rage, exhaustion, and disorientation (Terry et al., 2006). Depression was described by Mousavi and Samandar (2003) as a negative selfschema marked by ideas like helplessness, personal insufficiency, worthlessness, and self-blame. Anger is described as a person's reaction to a real or perceived threat to a person or group of people (Lazarus, 1991). While tension refers to sensations of jitteriness, apprehension, concern, and anxiety, fatigue is a feeling of both mental and physical exhaustion (Anshel et al., 1990). In contrast to depression, this is a negative self-schema marked by ideas like helplessness, personal shortcomings, worthlessness, and self-blame (Mousavi & Samandar, 2003). According to Kavanagh and Hausfeld (1986), people's attitudes, performance, and sense of self-efficacy can all be impacted by their mood states. Because of this, psychologists research how different types of physical activity impact mood and look for elements that have an emotional effect on mood states (Leppamaki, 2006).

Changes in mood can be utilised as an early indicator of overtraining and staleness, according to Morgan, Brown, Raglin, O'Conner, and Ellickson (1987). Pierce (2002) offered the argument that mood changes can be utilised to identify athletes who are prone to the illness before signs of subpar performance and protracted weariness are ever seen.

Two major psychological aspects that may have an impact on an athlete's performance and results are pre-competition mood states and state anxiety (MehdipoorKeikha, MdYusof&Jourkesh, 2015). An athlete's performance while participating in sports may suffer if their emotional state is not optimal. Adult athletes were the subject of several studies. The mood status of junior athletes should also be measured, though. The mood-performance link between children's athletes and adult athletes was not the same, according to Wong, Thung, and Pieter (2006). Recent studies have shown that factors like the length of the event, the type of sport, or even the venue may influence how an athlete feels before a competition (Brandt, Viana, Crocetta, & Andrade, 2016).

One of the primary sources of stress for athletes is competing (Nicholls, Holt, Polman& James, 2005). Athletes have the chance to acquire and develop abilities that will be useful in the future when competing in sports as children (MacNamara, Collins & Button, 2010). When they play sports, athletes feel a variety of emotions (Kristiansen & Roberts, 2010), and many of them may not be aware of how to control and manage their mood in order to prevent distractions. As a result, research is needed to examine the

emotional states of female athletes who participate in team sports versus solo sports. Any sport that has two or more participants, practises mostly in groups, competes as a team, and shares the results is considered a team sport, whereas an athlete competing alone and having individual results, which can be included in a team result, is considered an individual athlete (Lindwall, Johnson &Astrom, 2002). Track and field, karate, table tennis, and swimming were employed by Batini, Vai, and Babi (2014) as individual sports, while football, basketball, handball, and volleyball were used as team sports. According to MehdipoorKeikha et al. (2013), there are differences between team sports and individual sports in terms of mood state prior to the start of competition. The study's objective was to determine and contrast the emotional states experienced by middle-aged female athletes competing in team and individual sports at the 2019 National Master Championship in Dehradun, India.

METHOD

Participants

The participants were middle-aged female athletes (comprised of team sports and individual sports) who participated in the National Master Championship, Dehradun 2019 competition. In the current study, 289 participants (30±5 y) from the team (Basketball, Football, Hockey, Volleyball) and individual (Track and Field, Tennis, Table Tennis, Badminton) sports were recruited as respondents.

Instrument

The present study used a non-experimental design in which the researcher distributed the Brunel of Mood Scale (BRUMS) questionnaire one hour prior to the competition to the respondents. Studies have claimed that the closer the evaluation of psychological signs in athletes prior to competitions, the more comprehensive and precise the prediction of performance would be (Robazza, Gallina, D'Amico, Izzicupo, Bascelli, Di Fonso& Di Baldassarre, 2012). Respondents answered the questionnaire according to their actual feelings before the competition began. In this study, the pre-competition mood states among middle-aged female athletes were measured using the Brunel Mood Scale (BRUMS) by Terry, Lane, and Fogarty (2003). BRUMS was developed to serve as a brief measure of mood states among adolescent and adult populations. Brandt et al. (2016) confirmed that the internal consistency of the 24 items is (α = 0.85). BRUMS contains 24 items, comprised of six subscales, which are anger, confusion, depression, fatigue, tension and vigor. Based on Gendolla and Krusken (2001), mood can be categorized into two categories: a negative mood (including anger, confusion, depression, fatigue, and tension) and a positive mood (including vigor). All of the items on the instrument were graded using a 5-point Likert scale (0 = not at all, 1 = a little, 2 = moderately, 3 = quite a bit, 4 = extremely) according to their current mood. The items in each subscale are anger (annoyed, bitter, angry, bad-tempered items 7, 11, 19, 22), confusion (confused, mixed up, muddled, uncertain-items 3, 9, 17, 24), depression (depressed, downhearted, unhappy, miserable-items 5, 6, 12, 16), fatigue (worn out, exhausted, sleepy, tired-items 4, 8, 10, 21), tension (panicky, anxious, worried, nervous-items 1, 13, 14, 18), and vigor (lively, energetic, active, alert-items 2, 15, 20, 23).

Data Collection

Prior to the tournament, the managers and coaches of the competing teams were notified and briefed on the study. The 24-question BRUMS questionnaire had to be completed by the respondents. To explain the variables, descriptive data were reported as median and IQR. The data were analyzed using the non-parametric Mann-Whitney test. The statistical analysis was performed using SPSS 20.

RESULTS

Table 1 show the Non-parametric test was used to examine the comparison of mood states between team sport and individual sport among middle aged female athletes. The participants were categorized into two groups according to their sports: team or individual sport.

Table 1: Descriptive and Comparison between Team Sports and Individual Sports Female Athletes

Variables		S-W Statistics	S-W p-value	Median	IQR	MR	MW-U	Z	p-value
ANGER	Team	0.946	< .001	58	13	127.4	7496	-4.02	0.001*
	Individual	0.965	0.002	65	17	166.9			
CONFUSION	Team	0.953	< .001	60	22	136.3	8929	-1.98	0.048*
	Individual	0.917	< .001	67	14	155.8			
DEPRESSION	Team	0.939	< .001	66	26	153.1	9031.5	-1.83	0.067
	Individual	0.932	< .001	62	13	135			
FATIGUE	Team	0.955	< .001	53	14	146.5	10079	-0.34	0.732
	Individual	0.95	< .001	53	11	143.1			
TENSION	Team	0.929	< .001	49	14	139.3	9408	-1.3	0.195
	Individual	0.933	< .001	50	11	152.1			
VIGOR	Team	0.953	< .001	57	14	130.9	8065.5	-3.21	0.001*
	Individual	0.918	< .001	63	13	162.5			

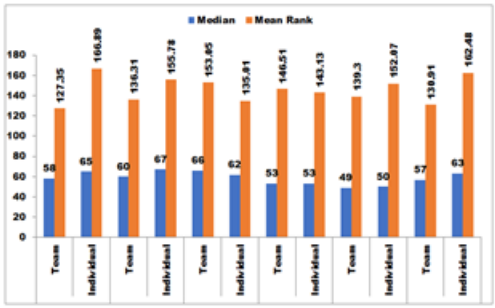

Figure 1: The Difference for Six Dimensionsof Mood Scales between Team and Individual Sports

DISCUSSION

In competitive sports, one of the most prevalent emotions is anger (Hanin & Syrja, 1995; Hanin, 2000; Robazza & Bortoli, 2003). A significant difference in anger between individual and team sports was found in this study (U=7496, p=.001). Anger made athletes feel irritated, bitter, furious, and bad-tempered. The outcomes of both individual and team sports, which are influenced by spectators and raucous cheering from the other side's fans, are same. In contrast to Mehdipoor Keikha et al. (2013), this study found that individual sports were associated with higher levels of anger one hour before to competition than team sports.

Even though the two types of sports provoke anger very differently, individual sports are more intense than team sports. The researcher can draw the following conclusion: Individual sports used in the current study,

such as tennis, badminton, track & field, likely required more concentration, precision, and lower levels of anger for optimum performance, while team sports, such as volleyball, hockey, basketball and football, may benefit from athletes who have higher scores of anger before competition.

According to studies, athletes who participate in sports that involve more physical contact tend to be more aggressive (Guilbert, 2006). Aggressive behavior can therefore result in anger, which may increase an athlete's physical strength. Anger may increase vigor, which increases drive for increased physical power. For instance, in rugby, anger may cause aggressiveness, which can boost physical strength and performance. According to McGowan and Miller (1989), the female karate champion's fury may really be used to boost self-confidence. Additionally, Terry and Slade (1995) discovered that the winning male karateka had higher pre-competition anger and self-confidence scores.

Athletes who have experienced disorientation may feel doubtful, jumbled, bewildered, and mixed up. Results revealed a significant difference in confusion (U=8929, p=.048), which may have been caused by athletes failure to recognize their opponents. Individual athletes frequently experience increased anxiety and trepidation before competitions since they are unaware of their opponent's performance. This makes it more difficult for individual competitors to prepare a strategy for the competition. On the other hand, team members seldom completely change, thus some of the players may be familiar with a number of the competitors. Athletes will recognize the finest and most relevant tactical and technical techniques in order to compete against the adversary. This might have explained why individual athletes felt so much more confused than in team sports. The findings of the current investigation were likewise consistent with those of Mehdipoor Keikha et al (2013).

According to Lim, Balbir, and Chong (2011), vigor is a crucial positive element in predicting players' sporting prowess. The outcome revealed a significant difference in vigor (U=8065.5, p=.001). This might be the result of competitors on both teams and individuals feeling energized before the tournament starts. According to Neil, Hanton, Mellalieu, and Fletcher (2011), athletes try more before competitions when they're feeling upbeat.

According to MehdipoorKeikha et al. (2013), the energy normally increases an hour prior to competition owing to hype up, which boosts athletes' self-confidence. Individual and team athletes who exhibit high levels of self-confidence inspire similar confidence in their teammates.

CONCLUSION

In the six dimensions of the mood scale, there was a significant difference recorded in anger, confusion, and vigor between team sports and individual sports among middle-aged female athletes, while on the other hand, there was no significant difference in depression, fatigue, and tension. Researchers discovered that specific sports had greater mean ranks of rage, perplexity, and vitality. This was due to the fact that anger may boost vigor, which in turn results in superior physical strength in individual sports. The average level of wrath, bewilderment, and vigor among athletes participating in individual sports where athletes compete against one another alone and with coaches is higher. As a result of the athletes' ability to communicate, solve problems together as a team, and encourage one another, their levels of rage, perplexity, and vitality have decreased. That encourages the team's enthusiasm, trust, and sense of self.

Last but not least, based on the current study, the researcher would like to underline how vital it is to gauge players' emotional states before a competition. Coaches should concentrate on athletes' psyche in addition to their physical preparation because research suggests that psychology accounts for 10% of training while accounting for 90% of performance during competition (Kuan, 2017).

RECOMMENDATIONS

The future researcher should go in depth by integrating the effect of mood states to outcome performance (winning or losing). This will help in investigating or reviewing the effect and relationship between mood states and performance outcome (winning/losing). This will significantly be helpful for the coaches, athletes and sports scientist to regulate and set the appropriate mood prior to and during competition.

PRACTICAL APPLICATION

The results of the study can be applied as references of the mood state prior to the competition. Hence with the result presented, it allows coaches, sports psychologist and athletes to acknowledge the psychological states of athletes prior to the game and prepare psychological methods or solutions needed including imagery, self-talk and pep-talk, in order to regulate appropriate mood in order to improve the athlete's performance/physical strength in sports. This investigation will help to produce large number of athletes that have better ability in controlling emotion especially before and during competition.

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