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Assessment of anger regulation strategies used by Taekwondo players

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Abstract
The present investigation examined strategies used by taekwondo players to regulate anger for which one hundred and fifty male and female All India Inter-University Taekwondo players who participated in All India Inter-University Taekwondo Championship held at Pune, Jaipur, Udaipur and Patiala respectively during the year 2010-11. All participants voluntarily participated in the study were the subjects of present investigation. The age of male and female participants was ranged from 18 to 25 years, with the mean age of 21.38 and 20.78 years respectively. 29- item mood regulation questionnaire proposed by Thayer et. al., 1994 were used for the assessment of anger regulation strategies. These items include:' Analyze the situation' (ES), 'Avoid the cause' (AC), 'Call, talk to, or be with someone' (CTTBO), 'Change location' (CLO), 'Control thoughts' (CT), 'Drink alcohol', 'Drink coffee or other caffeinated beverage' (DCOFF), 'Smoke cigarettes', 'Use drugs'(other than alcohol, cigarettes or coffee), 'Eat something' Engage in emotional activity' (EA), 'Engage religious/spiritual activity' (RA), 'Engage in a hobby' (EH), 'Engage in pleasant activities' (EPA), 'Engage in self-gratification' (SGRATI), 'Engage in stress management', 'Exercise', 'Go shopping', 'Listen to music' (LM), 'Put feelings in perspective' (TPF), 'Rest/ 'take a nap, sleep' (RTNAP), 'Tend to chores' (TC), 'Take a shower, bath, or splash water on face' (TS), 'Have sex', 'Try to be alone' (TTBA), 'Use humor' (UH), 'Use relaxation techniques' (URT), and 'Watch TV' (WTV). Participants were first asked if they thought it possible to change anger. If they believed it was possible to change anger, Participants were asked to read the strategies, nominate strategies they use to change anger and to rate the effectiveness of the methods. An open-ended question was also included to allow participant to add any strategies not included on the list, but used by the players, to be written in the corresponding space. The findings of present study revealed that the male participants were considered 11 different numbers of strategies effective to regulate anger. While, female taekwondo players reported 09 strategies effective to regulate anger. Male and female level taekwondo players believed that "exercise" was most effective strategy to regulate anger. Female taekwondo players perceived "Engage in religious activity" as most effective strategy to regulate anger. "Watch TV' was reported to be effective self- regulating strategy to regulate anger for both gender. "Change location" was considered important strategy by male players reduce anger. Finally, we can conclude that the taekwondo players believed, they are able to control their anger, and generally have a bank of strategies that are used to overcome anger and achieve optimum performance. Some strategies are proposed to be more popular and more effective than others. Coaches and players might use this information to analyze their own pre-competition preparation routines.

Keywords: Combative athletes, Taekwondo, anger, inter-university, likart scale

Introduction
Taekwondo is a Korean martial art and the national sport of South Korea. In Korean, tae means "to strike or break with foot"; kwon means "to strike or break with fist"; and do means "way", "method", or "art". Thus, taekwondo may be loosely translated as "the art of the foot and fist" or "the art of kicking and punching". The origins of the Korean martial art of Taekwondo go back 1500 years. Originally Taekwondo was taught for warfare, self-defence, and physical fitness. Over the centuries, the art form has spread throughout the world. Today, an estimated 75-120 million children and adults worldwide participate in martial arts with an estimated annual growth rate of 20-25% (Birrer, 1996) [3]. Taekwondo is practiced in over 140 countries around the world and 120 nations are official members of the sport's major organizing body, the World Taekwondo Federation (WTF). Taekwondo reached the Olympic stage as a demonstration sport in the 1988 [21] Seoul Olympics and the 1992 Barcelona Olympics. It became an official Olympic sport in the 2000 [15] Sydney Olympic Games. Mood is proposed to be a more effective predictor of performance in sports of a short duration, when the sport involves open skills, and when performance is assessed through a self-reference criterion (Beedie, *et al*., 2000). In predicting athletic performance and for a better understanding of the athlete's experience, there is, instead, a need to examine a variety of emotional states evident in the sport environment (Gould and Udry, 1994; Hanin and Syrja¨, 1995, 1996; Jones, 1995) [3, 11, 19, 26]. Of the many emotions, anger is frequently experienced and

expressed as aggressive behaviour in the athletic domain, particularly in combative and contact sports such as hockey, football, boxing, karate and taekwondo (Ruiz and Hanin, 2004a, b; Terry and Slade, 1995) [27, 37].

There has been a great deal of research investigating mood in sport (LeUnes, 2000 [15]; LeUnes and Burger, 1998). A focus of this research is the relationship between scores on The Profile of Mood States (POMS; McNair *et al*., 1971) [17] and performance (Beedie *et al*., 2000; Renger, 1993; Rowley *et al*., 1995; Terry, 1995) [15, 25, 26, 36]. By contrast, there has been very little research investigating the antecedents of mood and how athletes deal with intense mood states that might impair performance. The results of mood-performance research would suggest a need for researchers to direct their efforts to understanding how athletes control mood. One method of mood-management is self-regulation. It is suggested that individuals tend to actively monitor their mood and develop self-regulating strategies to reduce negative mood and increase positive mood (Thayer *et al*., 1994) [38]. Rusting and Nolen-Hoeksema (1998) [28] defined self-regulating strategies as 'thoughts and behaviors intended to eliminate, maintain, or change emotional states'. Conscious recognition of the intensity of mood and the anticipated impact of that mood on behavior is proposed to underlie the self-regulatory process (Mandler, 1984) [18]. Emotion regulation refers to individuals' attempts to influence their emotions (Gross, 2002). It is generally assumed that individuals seek to increase pleasant and decrease unpleasant emotions (Larsen, 2000). Self-regulation, however, is not driven exclusively by short-term hedonic considerations. Such instrumental motives might play a role in the regulation of emotion (Parrott, 1993; Tamir, 2005 [22, 45]; Tamir *et al*., 2007). Although investigation of strategies to self-regulate mood has received little attention in the sport psychology literature, there has been research in general psychology. Much of the research has focused on mood repair, where the aim is to reduce negative mood or increase positive mood. Research has shown that it is possible to alleviate negative mood using a number of different strategies. These strategies include: a) accessing positive information about the self (Josephson *et al*., 1996; Showers & Kling, 1996) [12, 29], such as thinking about past successes; b) re-appraising the cause of the negative mood (Gross, 1998) [6]. This is achieved by focusing on the cause of the problem; c) listening to music, which can be used to reduce tension (Sousou, 1997) [30]; d) using relaxation techniques (Berger *et al*., 1988) [2]; and e) anticipating social situations (Erber *et al*., 1996) [4], for example, thinking about meeting with friends which is expected to be a positive experience. Anger management is becoming an increasingly significant area of study in sport. This issue affects all people involved in the sporting environment. Anger Management in Sport: Understanding and Controlling Violence in Athletes addresses this important topic and provides strategies and interventions for overcoming excessive anger and aggression in athletes.

This dimension of mood is an unpleasant emotion. It arises when individuals feel they are kept by another's improper action from attaining a goal, yet feel capable of altering the situation (Frijda, 1986) [5]. To promote the defense of one's resources, anger increases aggression (Frijda, 1986) [5], which propels the person to confront others. So, it's promotes confrontational behaviors (Parrott, 2001). Although anger often leads to harmful consequences; it is sometimes useful (Averill, 1983; Tiedens, 2001). The instrumental implications of anger depend on the context in which it is experienced (Bonanno, 2001) [32].

Pieter *et al*. (2000) [23] reported that in male Filipino varsity taekwondo athletes, depression and fatigue were most influential in distinguishing between winners and losers. In the women, 80% were correctly classified as winners and 73.9% as losers. In a follow-up study, Pieter *et al*. (2006) [24] found that in 15-year old Filipino boys, 55.6% were correctly classified as winners and 64.9% as losers. Taekwondo experience (r = 0.71) and anger (r = 0.67) were most influential in distinguishing between winners and losers. In the girls (14 years), 60.0% were correctly classified as winners and 78.7% as losers.

In connection to all above findings present study was to investigate the strategies that taekwondo players use to regulate anger. Knowledge of the strategies that athletes use to regulate mood can help sport psychologists develop interventions designed to improve performance through controlling anger.

Methods

Participants

One hundred male and fifty female, All India Inter-University Taekwondo players from Taekwondo who participated in All India Inter-University Taekwondo Championship held at Pune, Jaipur, Udaipur and Patiala during the year 2010-11, Taekwondo players of Patiala, Chandigarh, Bhopal, Pune, Ajmar and Jaipur who voluntarily to participate of the study were the subjects. The age of male and female taekwondo players ranged from 18 to 25 years, with the mean age of 21.38 and 20.78 years respectively.

Description of Questionnaire

The Self-Regulating Strategies of Mood Questionnaire was the 29-strategies identified by Thayer *et al*. (1994) [38]. These items include: 'Analyze the situation' (ES), 'Avoid the cause' (AC), 'Call, talk to, or be with someone' (CTTBO), 'Change location' (CLO), 'Control thoughts' (CT), 'Drink alcohol', 'Drink coffee or other caffeinated

beverage' (DCOFF), 'Smoke cigarettes', 'Use drugs'(other than alcohol, cigarettes or coffee), 'Eat something' Engage in emotional activity' (EA), 'Engage religious/spiritual activity' (RA), 'Engage in a hobby' (EH), 'Engage in pleasant activities' (EPA), 'Engage in self-gratification' (SGRATI), 'Engage in stress management', 'Exercise', 'Go shopping', 'Listen to music' (LM), 'Put feelings in perspective' (TPF),'Rest/ 'take a nap, sleep' (RTNAP), 'Tend to chores' (TC),'Take a shower, bath, or splash water on face' (TS), 'Have sex', 'Try to be alone' (TTBA),'Use humor' (UH), 'Use relaxation techniques' (URT), and 'Watch TV' (WTV). The subjects are required to indicate the extent to which these strategies were directed to changing anger. Participants were asked: "Indicate what strategies you adopt if you are angry and you try to change that feeling" (anger);

Administration of Questionnaire and Collection of Data

In order to ensure full co-operation from the subjects, we had a meeting with them. The Self-Regulating Strategies of Mood Questionnaire was administered away from the site of competition. Participants were first asked if they thought it possible to regulate anger. If they believed it was possible to regulate anger, participants were asked to read the strategies, nominate strategies they use to regulate anger, and to rate the effectiveness of the methods. An open-ended question was also included to allow participant to add any strategies not included on the list, but used by the players, to be written in the corresponding space. Participants was also rated the relative effectiveness of the strategies used to regulate anger. Owing to the nature of some of the strategies, participant confidentiality was essential to ensure honest responses; therefore, the only participant details recorded was gender and age. Sport and level of competition were noted separately since this information might have reduced confidentiality. Perceived effectiveness of strategies was recorded on a 9-point Likert scale by;

9 All ways effective	8	7 Mostly Effective	6	5 Sometime effective	4	3 Seldom Effective	2	1 Not at all effective

Statistical Procedure

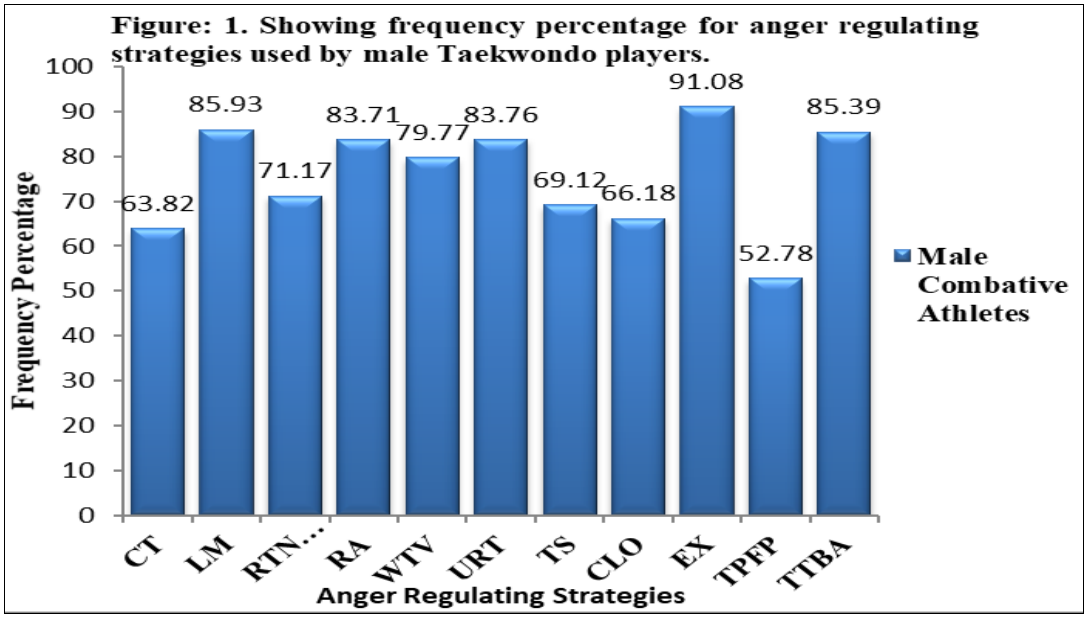
The data was analyzed by computing frequencies and percentage by finding out the percentage of the subjects who used each self-regulatory strategy for regulate anger. Mean rating of effectiveness was used to identify strategies. In order to find out the significance differences among regulating strategies for anger, as perceived by male and female Taekwondo players an analysis of variance (ANOVA) was used for anger. Where ever, ANOVA was found significant, Scheffe's Test of post-hoc Comparisons was used to find out which strategy was more effective than others to regulate anger. For analyzing data and preparing tables and figures Microsoft Excel- 2007 were used.

Results

The result of present investigation after analysis of taekwondo player's data revealed that the male taekwondo players considered many strategies for regulating anger. The male participants reported using 11 strategies to regulate anger out of 29 strategies. Data in table-1, as much as 11 strategies were considered effective by 50% or more of the sample. The strategies included were 'listen to music' (85.93%); 'exercise'(91.08%)'; 'watch TV'(79.77%); 'change location' (66.18%); 'engage in religious /spiritual activity (83.71%);'use relaxation technique' (83.76%) ; control thoughts'(63.83%);'take shower, bath or splash water on the face'(69.12%); 'try to be alone'(85.39%) ;'rest /take a nap'(71.17%) and 'try to put feeling into perspective' (52.78%) (Table No. 1 and Figure No. 1).

Table 1: Frequency Percentage, Effectiveness Scores and Standard Deviation for Anger Regulating Strategies Used by Male University Taekwondo Players.

SN	Strategies	Anger		
		F%	M	SD
1	Control though	63.82	6.31	2.87
2	Listen to music	85.93	8.15	2.80
3	Rest take a nap	71.17	7.38	2.80
4	Engage in religious activity	83.71	7.40	1.87
5	Watch TV	79.77	6.33	2.87
6	Use relaxation technique	83.76	7.65	2.87
7	Take shower	69.12	7.12	2.88
8	Change location	66.18	7.14	2.80
9	Exercise	91.08	8.15	2.86
10	Put feeling into perspective	52.78	6.31	3.90
11	Try to be alone	85.39	6.39	2.82



The female taekwondo players also considered 9 strategies for regulating anger. Data in table-2 further indicated that 9 strategies were considered effective by 60% or more of the sample. The strategies included were 'put feeling into perspective' (66.38%) ;'listen to music' (88.72%) ; 'engage in religious activity' (83.04%) ;'take shower, bath or splash water on the face' (76.94%); 'watch TV' (71.32%); 'exercise' (82.96%); 'rest/ take a nap'(60.82%) ;'try to be alone' (63.82%) and 'control thoughts'(63.86%) (Table No. 2 and Figure No. 2).

Table 2: Frequency Percentage Effectiveness Scores and Standard Deviation for Anger Regulating Strategies Used by Female University Taekwondo players.

SN	Strategies	Anger		
		F%	M	SD
1	Try to be alone	63.82	5.74	2.45
2	Control though	63.86	5.38	3.04
3	Listen to music	88.72	7.74	2.00
4	Rest take a nap	65.82	5.96	2.26
5	Engage in religious activity	83.02	7.18	2.20
6	Watch TV	71.32	6.18	2.12
7	Take shower	76.94	6.60	2.24
8	Exercise	82.96	7.80	1.86
9	Try to put feeling into perspective	66.38	5.72	2.54

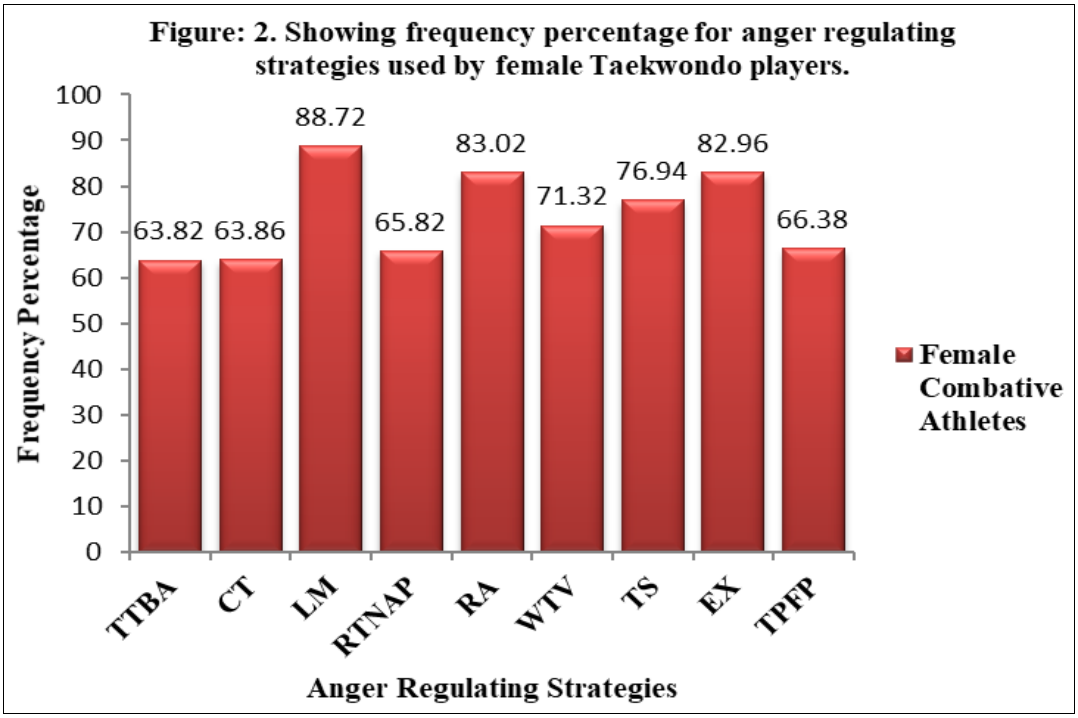
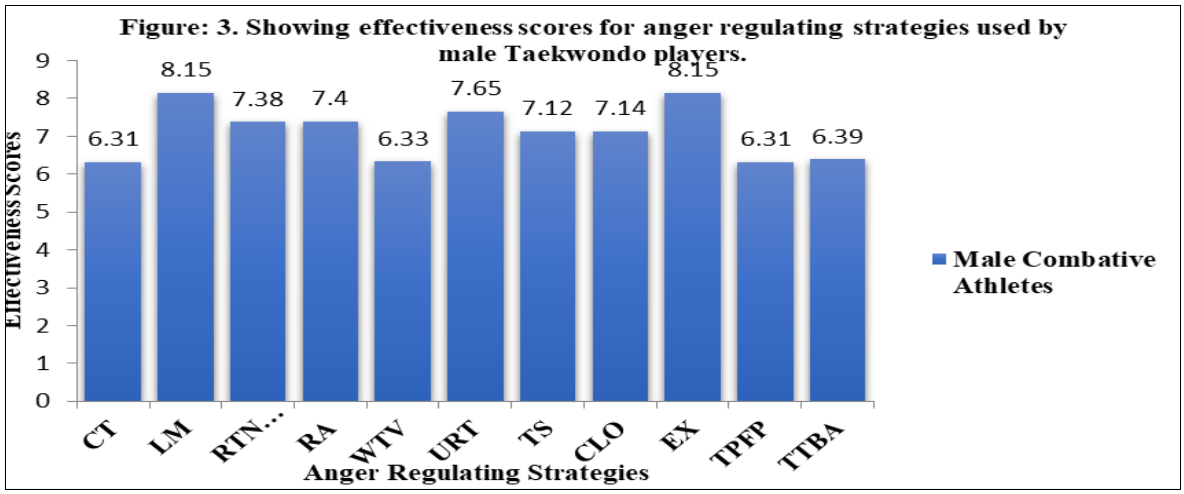
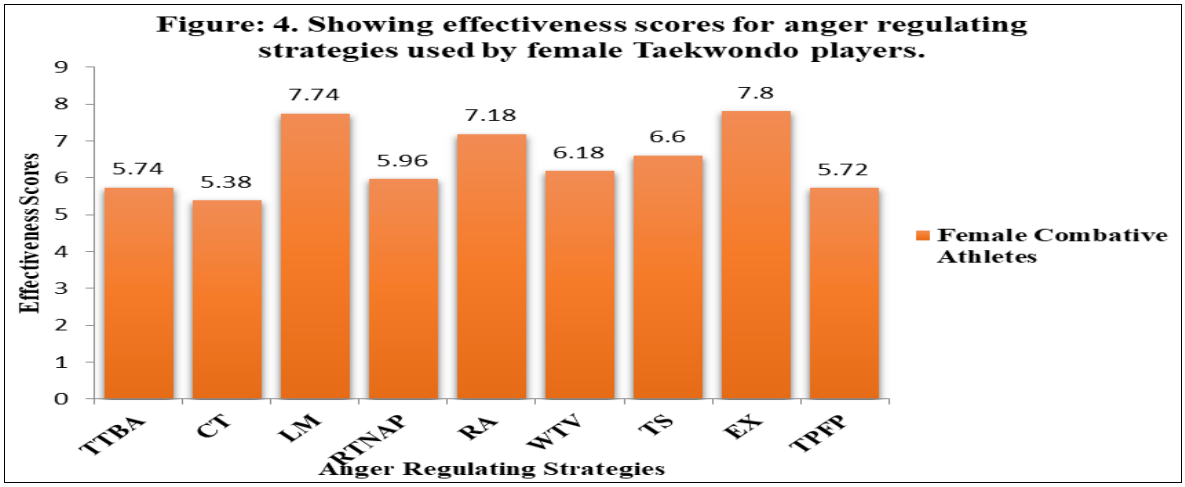


Table 3: Mean Ranking of Different Strategies Used to Regulate Anger by Male and Female Taekwondo Players.

Strategies	Mean Effectiveness Scores		Ranking	
	Male	Female	Male	Female
Exercise	7.5100	7.0400	1	3
Listen to music	7.1300	7.7200	2	1
Use relaxation technique	6.5600	4.0943	3	15
Engage in religious activity	6.4200	7.1400	4	2
Rest take a nap	6.3300	5.8600	5	8
Take shower	6.2100	6.5800	6	4
Change location	6.0400	4.5660	7	12
Try to be alone	5.9300	5.7200	8	7
Control though	5.4100	5.3600	9	8
Watch TV	5.3900	6.1600	10	5
Try to put feeling into perspective	5.1300	5.9600	11	6
Engage in pleasant activity	4.8912	4.6415	12	11
Analyze the situation	4.7891	4.0943	13	14
Use stress management activity	4.6599	3.5849	14	17
Drink coffee	4.5986	3.2642	15	21
Avoid the cause	4.4150	4.9245	16	10
Use humor	4.2585	4.4717	17	13
Call, talk or to be with someone	4.0680	3.4717	18	19
Eat something	3.2789	3.4334	19	20
Engage in hobby	2.9796	3.6792	20	16
Tend to chores	2.8980	3.5066	21	22
Self-gratification	2.8980	3.5472	22	18
Have sex	2.6463	1.2642	23	26
Engage in emotional activity	2.3741	2.9811	24	23
Read & Write	2.1732	2.3200	25	24
Go shopping	2.1429	2.3080	26	25
Drink alcohol	1.5102	0.8113	27	28
Smoking	1.0816	0.8113	28	29
Use drugs	1.0748	1.3774	29	27





It is obvious from Table No. -3 that 'exercise', "listening to music", "use relaxation technique", were most effective strategy, "engage in religious activity", "rest take a nap", "take shower", "change location, try to be alone", rated as effective strategies, "control though", "watch TV", "try to put prospective feeling", "analyze the situation", "use stress management technique", "drink coffee" considered as some time effective strategies perceived by male combative athletes. Where as in case of female athletes, "exercise" 'listening to music', 'engage in religious activity', were considered most effective strategies "rest take a nap", "take shower", "change location, try to be alone", rated as effective strategies, "control though", "watch TV", "try to put prospective feeling", were rated effective strategies to regulate anger. 'Using drugs', 'drinking alcohol', 'smoking' and 'having sex' were rated as least effective by both the groups to regulate anger. Where ever, ANOVA was found significant, Schiffe's Test of post-hoc Comparisons was computed to find out which strategy was more effective than the others to regulate anger and the data presenting to this has been pertaining in table 04 to 05 respectively.

Table 4: Analysis of Variance of Mean Scores of Different Strategies Used by Male Taekwondo Players to Regulate Anger.

Mood state Anger	Source of variance	Sum of Squares	df	Mean Square	F
	Between Groups	529.782	10	52.978	9.024*
	Within Groups	6393.640	1089	5.871	
	Total	6923.422	1099		

*Significant at .05 level
$F_{.05}$ (11, 1089) =1.83

It was evident from table-4 that male taekwondo players differ significantly in the use of anger regulating strategies to regulating anger. The obtained F-ratio of 1.83 anger was higher than the respective required F-ratios to be significant at .05 levels

Table 5: Analysis of Variance of Mean Scores of Different Strategies Used by Female Taekwondo Players to Regulate Anger.

Mood state Anger	Source of variance	Sum of Squares	df	Mean Square	F
	Between Groups	240.920	8	30.115	5.171
	Within Groups	2568.460	441	5.824	
	Total	2809.380	449		

*Significant at .05 level
$F_{.05}$ (8,468) =1.94

Table -5 stated that the female taekwondo players differ significantly in the use of anger regulating strategies for regulating anger and obtained F-ratio of 1.94 for anger be insignificant at .05 level. Since the F-ratios for strategies used to regulate anger was found statistically significant, Schiff's Test of post hoc Comparisons.
In addition our results revealed that there were significant differences between mean scores of listen to music and try to be alone (2.00); between listen to music and control thought (2.38); between listen to music and try to put feeling in to perspective (1.54); between take shower, at .05 level. As the mean differences between these strategies were more than the confidence interval of 1.96 required to be significant at .05 levels. The rest of the mean differences between different strategies were insignificant at .05 levels. As the mean differences between different strategies were less than the confidence interval of 1.96 required at .05 levels. The taekwondo players gave equal important to listen to music, engage in religious activity and exercise to reduce fatigue followed by take shower.

Discussion

The purpose of the study was to investigate strategies used to self –regulate anger by university level male and female taekwondo players. The results indicated that "exercise" and "listening to music" were rated as most valuable effective strategy to regulate anger. "Take a shower, bath or splash water on the face" was considered most effective to regulate anger. In case of female taekwondo players "listening to music", "religious activity" and "exercise" were also considered most effective strategy to regulate anger. "To take a shower, bath or splash water on the face" was most effective to anger. "Trying to control thoughts" was considered as sometime effective strategies to regulate anger. "Drink alcohol", "smoking" and "use of drugs" were rated least effective strategies to regulate anger by university level male and female combative athletes regulate anger followed by use of relaxation technique, exercise, rest/take a nap, try to be alone.
"Listening to music has been reported as an effective strategy to regulate anger of male and female combative athletes. The result of the present study is consistent with the theoretical proposition on the effect of music on the psychological state. According to Karageolist and Terry (1995) [36], music can have a stimulating or a sedative effect on mood. They further reported that the influence of music on psychological state depends on individual factors such as age, musical preferences, and it is also influenced by cultural factors, socio- economic status and class. Further music may also serve as a kind of self therapy, and may help people to identify feelings, work through conflicts, and regain control over the psychic process (Behae, 1997; De, Nora, 1999, Gabarielsson, 2003; Laiho, 2002; Larson, 1995; Lehtonen, 1986; 1993, Ruud, 1997; Slobada, 1992; Small, 1998) [41, 42, 47, 48, 49,

[50, 52, 56]. Music was also considered to help tension relief and cathartic release to negative emotions (Sloboda, 1992; Ruud, 1997; Lacourse *et al*., 2001; Sloboda and O'Neill, 2001; Schwartz and Fouts, 2003). Wells and Hakanen (1991) [46, 52, 53, 54, 55, 57] found that the most used mood regulatory uses of music was " get me pumped up", "strengthen my mood", and lift my spirits", which were all related to mood improvement. Thayer's, 1994; Stevens and Lane's, (2001) [32, 38] findings indicated that "listening to music" was most effective strategy to regulate various mood states. The study of Hewston et. al. (2005a, 2005b) [9] explained that music may be an effective tool to generate pre- competition mood state associated with successful performance.

On the other hand, music also seems to help in managing negative moods in several ways. Researchers have proposed that music may serve as a kind of self-therapy, and may help people to identify feelings, work through conflicts, and regain control over psychic processes (Behne, 1997 [41]; DeNora, 1999; Gabrielsson and Lindström Wik, 2003; Laiho, 2002; Larson, 1995; Lehtonen, 1986; 1993; Ruud, 1997; Sloboda, 1992; Small, 1998) [43, 47, 48, 49, 50, 52, 54, 56].

"Exercise" was perceived most valuable effective strategy to regulate anger. The results suggested that exercise often enhances positive mood, in addition to regulating negative mood and help him/her to release aggression. Exercise appears to be an effective strategy to regulate bad mood, anger and depression. Research findings generally supported the notion that exercise is associated with improved mood (Berger and Molt, 2000). Thayer *et al*., (1993) [15, 25] indicated that moderate exercise has proved to be one of the most effective mood- regulating behaviors, probably because its primary mood effect is reduced tension. Past research has found links between success in an exercise programme and improved self-efficacy (McAuley, 1993; Poag and McAuley, 1992). The present study, however, found that participants who engaged in regular exercise did not differ in perceived self-efficacy from individuals on the waiting list.

Further, "engage in religious activity" emerged as one of the most effective strategies to regulate anger in both male and female combative athletes. It seems that religious activities help taekwondo players to concentrate his/herself or seek help from God, indicating their devotion and faith in religious activities. Parker and Brown, 1982; Gallup (1989) [44, 51] identified, "religious activities" as most effective behavior to self- regulates moods. Rao *et al*. (1984) stated that a greater proposition of general population reported that praying to God is to escape negative feeling in uncontrolled situation.

"Take a shower, bath or splash water on the face" were considered an important strategy to regulate anger. Whereas in case of female taekwondo players "to take a shower, bath or splash water on the face" was an effective strategy to regulate anger. Steven and Lane (2001) [32] indicate that "take shower/ bath or splashing water on the face" was effective strategy to regulate various mood states except confusion. They further stated that 'take a shower/ bath or splashing water on the face' have different effects on mood states.

Findings of present study, indicated that "control thoughts" was important strategies to regulate anger. "Control thoughts" gives a direction to proposed action; reduce error, clears whole picture about the situation. "Control thoughts" may help athletes to take best possible action in a particular situation and enable him/her to plan, leading to better compete. Controlling thoughts improve one's decision making ability and enables to give best performance in uncontrolled situation. Trying to control thoughts is a supportive strategy to neutralize our negative thinking, minimize our conflicts and find out the best solution for the problem. The results of the study were consistence with the findings of Thayer et.al., (1994) [38] who found that most effective self- regulative strategy was to control thoughts through self-talk. Steven and Lane, (2001) [32] indicated that athletes reported thought controlling as the most common mood regulating strategy. Terry et.al., (1995) [36] argued that "a control thought was less popular strategy but rated as most effective strategy to regulate various mood states.

Further, change location was also perceived as an effective strategy by taekwondo players to regulate anger. Steven and Lane, (2001) [32] proposed that changing location may influence mood in at least two ways. First, it may be used as a distraction, in an attempt to reduce negative mood state, or by distracting attention. Second, searching for more positive stimuli elsewhere may be used in an attempt to increase positive mood.

"Watching TV" also rated fourth and fifth ranked by male and female athletes respectively. It has been perceived as an effective strategy in anger. It is an entertaining and mood relaxing element. "Watching TV" is associated with improved positive mood, and considered as a positive mood management strategy because it appears to involve less active engagement than other strategies. Furthermore, watching TV seems to be a passive way of reacting to anger. This behavior probably is only an indirect way of controlling the anger. The results of the present study land to support the findings that "watching TV" was rated some time effective strategy for changing a bad mood (Thayer *et al*., 1994) [38]. The results of present study revealed that drinking alcohol, smoking, and use of drugs were least effective strategies to regulate anger in male and female taekwondo players.

The results concluded that the male and female taekwondo players believed that they are able to control anger, and generally have a bank of strategies that are used to alter anger that might not be conducive to the optimum performance. Some strategies are proposed to be more popular and more effective than others. Coaches and players might use this information to analyze their own pre-competition preparation routines. It is important to remember, that effectiveness of identified strategies may differ in different situation for male and female combative athletes.

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