



RELATIONSHIP OF PERCEIVED MOTIVATIONAL CLIMATE TO GOAL ORIENTATION AND MENTAL TOUGHNESS OF MALE AND FEMALE STUDENT ATHLETES

Dr. M. Anbalagan

Assistant Professor, Department of Physical Education, Meenakshi Physical Education
College, Thathanur, Tamilnadu

Cite This Article: Dr. M. Anbalagan, "Relationship of Perceived Motivational Climate to Goal Orientation and Mental Toughness of Male and Female Student Athletes", International Journal of Applied and Advanced Scientific Research, Volume 2, Issue 2, Page Number 373-375, 2017.

Abstract:

A sample of 253 student athletes (125 male and 128 female) was randomly drawn from various colleges located in Cuddalore city. They were non- physical education students studying at graduate and postgraduate levels. The age of these participants ranged from 19 to 31 years (Mean age = 24.60, SD = 6.15). Findings of the present study revealed gender differences in perceived motivational Climate, goal orientation, and mental skills of student athletes. Perceived mastery climate was found positively related to both task orientation and ego orientation whereas perceived performance climate was found significantly related only to task orientation of students.

Key Words: Perceived Motivational Climate, Goal Orientation, Mental Toughness.

Introduction:

Recent studies of motivational patterns in sport, exercise and physical education settings have used a social cognitive perspective (Duda et al., 1995; Roberts, 1992). This perspective examines how individuals cognitively process and develop their views about achievement under various social contexts and influences (Bandura, 1997; Roberts, 1992). The dominant perspective with the social cognitive frame work has been the achievement goal orientations approach and related themes, such as motivational climates (e.g., Dweck & Leggett, 1988; Nicholls, 1989). Achievement goal theory (Ames, 1992; Nicholls, 1984) is a widespread theoretical perspective for studying motivation in sports and physical education. According to the achievement goal orientation theory, individuals strive to demonstrate competence in achievement settings through the adoption of two distinct goals i.e., task orientation and ego orientation (Roberts, Treasure, & Conroy, 2007). In certain situations, a person might be interested in the mastery of task, self improvement, and effort, thereby reflecting a task goal orientation; perception of ability is typically based on achieving a personal standard of performance. In contrast, an individual's focus may be on winning, or demonstrating superior ability through performing better than others or performing equally to others with less effort, thus reflecting an ego goal orientation; perceived ability is usually normatively referenced. Individual goal orientation has been suggested as a dispositional variable that determines the probability of adopting a certain goal of action (i.e., task or ego state of goal involvement) and a particular behavior pattern in achievement contexts (Dweck & Leggett, 1988).

The aim of the present study was to examine the relationship of perceived motivational climate to goal orientation and mental toughness of student athletes. In addition, the present study also examined differences in perceived motivational climate, goal orientation, and mental toughness of male and female student athletes. Gender differences were analyzed in order to further our knowledge of the different components of motivational climate, goal orientation and mental toughness. Some research (e.g., Duda & Whitehead, 1998) conducted from an achievement goal theory perspective has identified clear differences between males and females with regard to goal characteristics. Males were found to be more focused on winning and demonstrating ability to others in achievement contexts than females, which, according to these authors, suggest underlying gender differences in goal orientation. Studies have also revealed gender differences in the perception of motivational climate (e.g., Carr & Weigand, 2001) where males perceived performance-oriented motivational climate more while females perceived task-oriented motivational climate more than males (e.g., Carr & Weigand, 2001; Santos-Rosa, 2003). In view of the above, the present study hypothesized that (i) male and female student athletes will differ significantly in terms of their motivational climate, goal orientation and mental toughness, and (ii) perceived motivational climate by student athletes will be significantly related to their goal orientation and mental toughness.

Methodology:

A sample of 253 student athletes (125 male and 128 female) was randomly drawn from various colleges located in Cuddalore city. They were non- physical education students studying at graduate and postgraduate levels. The age of these participants ranged from 19 to 31 years (Mean age = 24.60, SD = 6.15).

Results:

Goal Orientation:

One-way analysis of variance F values presented in Table 1 revealed significant differences between task goal orientation, $F(1,152) = 445.63$, $p < .001$, and ego goal orientation $F(1, 152) = 110.68$, $p < .001$, of male and female students. Female students have shown higher task goal orientation ($M = 3.83$, $SD = .39$) in

comparison to male students ($M = 2.78$, $SD = .40$). Similarly, ego goal orientation was higher ($M = 3.76$, $SD = .42$) among female than among male students ($M = 3.08$, $SD = .59$).

Table 1: Mean scores and SDs along with the analysis of variance F values for the measures of goal orientation, perceived motivational climate and mental toughness of male and female participants

Variables	Male		Female		F(1,252)	P
	Mean	SD	Mean	SD		
Perceived Motivational Climate						
Mastery Climate	3.54	0.52	4.1	0.52	72.51	0.001
Performance Climate	2.86	0.67	3.29	0.69	25.6	0.001
Goal Orientation						
Task Orientation	2.78	0.4	3.83	0.39	445.63	0.001
Ego Orientation	3.08	0.59	3.76	0.42	110.68	0.001
Mental Toughness						
Self Confidence	20.72	2.68	19.53	2.76	12.12	0.001
Negative Energy Control	18.3	1.98	19.2	1.73	14.7	0.001
Attentional Control	18.85	2.18	18.12	2.01	7.67	0.01
Visual and Imagery Control	20.67	3.49	21.42	2.93	3.36	0.07
Motivational Level	19.04	2.88	19.55	2.46	2.29	0.13
Positive Energy Control	19.4	1.85	20.58	2.53	18.12	0.001
Attitude Control	19.11	2.21	20.28	2.28	16.91	0.001

Perceived Motivational Climate:

Significant difference between male and female students' perception of motivational climate was observed for both mastery climate, $F(1, 152) = 72.51$, $p < .001$, and performance climate $F(1, 152) = 25.60$, $p < .001$. Motivational climate was perceived as more mastery oriented by female students ($M = 4.10$, $SD = .52$) than their male students counterparts ($M = 3.54$, $SD = .52$). Similarly, motivational climate was perceived as more performance oriented by females ($M = 3.29$, $SD = .69$) than male students ($M = 2.86$, $SD = .67$).

Mental Toughness:

In regard to the mental toughness of male and female students, analysis of variance F values clearly revealed significant differences for sub-measures of self-confidence, $F(1, 152) = 12.12$, $p < .001$, negative energy control, $F(1, 152) = 14.70$, $p < .001$, attention control, $F(1, 152) = 7.67$, $p < .01$, positive energy control, $F(1, 152) = 18.12$, $p < .001$ and attitude control, $F(1, 152) = 16.91$, $p < .001$. Mean scores clearly indicate that male students have shown greater control ($M = 20.72$, $SD = 2.86$) than female students ($M = 19.53$, $SD = 2.76$). Attention control was also greater among male ($M = 18.85$, $SD = 2.18$) than among female students ($M = 18.12$, $SD = 2.01$). However, female students have shown greater negative energy control ($M = 19.20$, $SD = 1.73$), positive energy control ($M = 20.58$, $SD = 2.53$) and attitude control ($M = 20.28$, $SD = 2.28$) in comparison to their male students counterparts (Mean scores 18.30, 20.67, 19.04, 19.40, 19.11; SDs = 1.98, 3.49, 2.88, 1.85 and 2.21 respectively). Although female students have shown higher levels of visual and imagery control and higher motivational levels in comparison to the male students, the differences were not found as statistically significant ($p < .05$).

Relationship of Perceived Motivational Climate:

Pearson's coefficient of correlations of students' scores on perceived mastery climate and perceived performance climate with goal orientation and mental toughness separately for male students, female students and total scores are presented in Table 2.

Table 2: Pearson's coefficient of correlation of perceived motivational climate with goal orientation and mental toughness of male and female participants

Variables	Mastery Climate			Performance Climate		
	Male	Female	Total	Male	Female	Total
Goal Orientation						
Task orientation	.37**	.26**	.55**	0.07	0.15	.31**
Ego orientation	0	0.09	.29**	-0.1	-.19*	0.07
Mental Toughness						
Self Confidence	-0.01	-0.04	-.13*	-0.01	0.01	-0.06
Negative Energy Control	-0.12	0.05	0.08	-0.08	0.05	0.06
Attentional Control	-0.02	-0.06	-0.12	-0.05	0.05	-0.06
Visual and Imagery Control	0.04	-0.06	0.05	0.19	0.09	.17*
Motivational Level	-0.01	-0.08	0.01	-0.01	-0.12	-0.03
Positive Energy Control	.18*	0.01	.20**	-0.1	-0.1	-0.01

Attitude Control	.22*	0.05	.24**	-0.12	0.07	0.06
------------------	------	------	-------	-------	------	------

Results revealed that perceived mastery climate was significantly related to the task orientations of both male ($r = .37, p < .01$) and female students ($r = .26, p < .01$). Perceived performance climate was negatively related to ego orientation of female students ($r = -.19, p < .05$). Perceived mastery climate was also positively related to positive energy control ($r = .18, p < .05$) and attitude control ($r = .22, p < .05$) among male students. However, for the total scores, perceived mastery climate was significantly and positively related to students' task orientation ($r = .55, p < .01$) and ego orientation ($r = .29, p < .01$). In regard to mental toughness, perceived mastery climate was also found positively related to positive energy control ($r = .20, p < .01$) and attitude control ($r = .24, p < .01$), however, it was negatively related to self-confidence of students ($r = -.13, p < .05$). Perceived performance climate was found positively related to task orientation ($r = .31, p < .01$) and visual and imagery control ($r = .17, p < .05$). None of the other correlations was found as statistically significant.

Conclusion:

Findings of the present study revealed gender differences in perceived motivational Climate, goal orientation, and mental skills of student athletes. Perceived mastery climate was found positively related to both task orientation and ego orientation whereas perceived performance climate was found significantly related only to task orientation of students. However, the relationship of perceived motivational climate to mental toughness of student athletes was not very clear. These findings suggest that more studies are needed to examine the determinants of mental skill toughness of student athletes in Indian socio cultural context. Also, it is important to understand how different structures of motivational climate facilitate the development of adaptive and maladaptive motivational processes in student athletes, how these structures operate and how they can be altered through intervention programmes.

References:

1. Ames, C. (1992). Achievement goals, motivational climate, and motivational processes. In G.C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 161-176). Champaign, IL: Human Kinetics.
2. Balaguer, I., Duda, J. L., Atienza, F. L., & Mayo, C. (2002). Situational and dispositional goals as predictors of perceptions of individual and team improvement, satisfaction and coach ratings among elite female handball teams. *Psychology of Sport and Exercise*, 3, 293-308.
3. Bandura, A., (1997). *Self-efficacy: The exercise of control*. New York: Freeman and Company.
4. Carr, S., & Weigand, D. A. (2001). Parental, peer, teacher, and sporting hero influence on the goal Or Cervelló, E., & Santos, F. J. (2001). Motivation in sport: An achievement goal perspective in young Spanish recreational athletes. *Perceptual & Motor Skills*, 92 (2), 527-535.
5. Duda, J. L., & Hall, H. (2001). Achievement goal theory in sport: Recent extensions and future directions. In R. N. Siger, M. Murphy, and L. K. Tennant (Eds.), *Handbook of research on sport psychology* (2nd ed.). Macmillan.
6. Duda, J. L. & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, 84, 1-10.
7. Duda, J. L., & Ntoumanis, N. (2005). After-school sport for children: Implications of a task-involving Motivational climate. In J. L. Mahoney, J. Eccles, & R. Larson (eds.), *after school activities: Contexts of development* (pp. 311-330). Mahwah, NJ: Erlbaum.
8. Duda, J. L., & Seifriz, J. J. (1992). Relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. *Journal of Sport and Exercise Psychology*, 14, 375-391.
9. Duda, J. L. & Whitehead, J. (1998). Measurement of goal perspectives in the physical domain. In J.L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 21-48). Morgantown, WV: Fitness Information Technology. Duda, J. L., Chi, L., Newton, M. L., Walling, M.D., & Catley, D., (1995). Task and ego orientation and intrinsic motivation in sport. *International Journal of Sport Psychology*, 26, 40-63.
10. Reinboth, M., Duda, J. L., & Ntoumanis, N. (2004). Dimensions of coaching behavior need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion*, 28, 297- 313.
11. Roberts, G. C. (1992). Motivation in sport and exercise: Conceptual constraints and convergence. In G. Roberts (Ed.), *Motivation in sport and exercise*, (pp. 3- 29). Champaign, IL: Human Kinetics.
12. Santos-Rosa, F. J. (2003). *Motivación, ansiedad y flow en Jóvenes Tenistas*. Doctoral dissertation, University of Extremadura, Spain. Seifriz, J. J., Duda, J. L., & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. *Journal of Sport & Exercise Psychology*, 14,
13. Walling, M. D., Duda, J. L., & Chi, L. (1993). The Perceived Motivational Climate in Sport questionnaire: Construct and predictive validity. *Journal of Sport & Exercise Psychology*, 15, 172-183.