



Candidates must complete this page and then give this cover and their final version of the extended essay to their supervisor.

Candidate session number

Candidate name

School number

School name

Examination session (May or November)

May

Year

2013

Diploma Programme subject in which this extended essay is registered: Psychology

(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay: What Motivational Climate Should a Coach Employ in Order to Achieve Optimal Performance in Athletes?

### Candidate's declaration

*This declaration must be signed by the candidate; otherwise a grade may not be issued.*

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

I am aware that the word limit for all extended essays is 4000 words and that examiners are not required to read beyond this limit.

This is the final version of my extended essay.

Candidate's signature:

Date:

## Supervisor's report and declaration

*The supervisor must complete this report, sign the declaration and then give the final version of the extended essay, with this cover attached, to the Diploma Programme coordinator.*

Name of supervisor (CAPITAL letters)

*Please comment, as appropriate, on the candidate's performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate's own work. You may attach an additional sheet if there is insufficient space here.*

is a school athlete and has always been curious of the effects of the various coaching styles to the performance of the athletes. It was easy for him to identify the topic for this Extended Essay. Always a self-starter, he approached this research with excitement and enthusiasm. He would always be in consultation, asking proper questions that can lead to better understanding and deeper discussion of his topic.

His greatest weakness seemed to fall in organizing and categorizing the different ideas he came across with during research. He had a great difficulty in identifying which ideas to use to support the stand he has brought forward in this paper. Expressing his thoughts in writing also became a big challenge. But for this, he made up by putting in extra time and effort in checking, revising and editing his work.

During our Viva Voce, I asked him that aside from those he shared in his essay, what else did he want people to know? His answer was very direct, "I want them to know that I did my very best and I gave all that I can in writing this essay". What you will read is a result of 's patience, determination and quest for answers.

*This declaration must be signed by the supervisor; otherwise a grade may not be issued.*

I have read the final version of the extended essay that will be submitted to the examiner.

To the best of my knowledge, the extended essay is the authentic work of the candidate.

I spent  hours with the candidate discussing the progress of the extended essay.

Supervisor's signature:

Date:

## Assessment form (for examiner use only)

Criteria	Achievement level					
	Examiner 1	maximum	Examiner 2	maximum	Examiner 3	
A research question	2	2		2		
B introduction	2	2		2		
C investigation	4	4		4		
D knowledge and understanding	4	4		4		
E reasoned argument	3	4		4		
F analysis and evaluation	4	4		4		
G use of subject language	3	4		4		
H conclusion	2	2		2		
I formal presentation	4	4		4		
J abstract	2	2		2		
K holistic judgment	3	4		4		
Total out of 36	33					

# PSYCHOLOGY

## EXTENDED ESSAY

What Motivational Climate Should a Coach Employ in  
Order to Achieve Optimal Performance in Athletes?

*By*

**Candidate No:**

*May 2013*

Word Count

3,942 words

## **ABSTRACT**

In everyday sports, there are different ways as to how one can be motivated given the environment that the athletes are in. Intrinsically, the personality of the athlete may determine how he responds to the stimuli given to him. On the other hand, extrinsic factors such as the motivational climate affects how the athlete perceives the task and ultimately, affect his performance.

This paper attempts to investigate what motivational climate a coach should employ. Furthermore, how this can help optimize performance of the athlete given his personality. This therefore brings the research question to: “What Motivational Climate Should a Coach Employ in Order to Achieve Optimal Performance in Athletes?”

Different journals, books, studies, and literatures are consulted in this paper. The Achievement Goal Theory of Nicholls and Self Determination Theory of Ryan and Deci will be used in this paper. Relationships between the two motivational theories and the motivational climate will be examined and analyzed given different studies done by sport psychologists.

Results have yielded that a task-oriented motivational climate is better than an ego-oriented motivational climate given that there more enjoyment and development of competence rather than having a higher anxiety level that is caused by the ego-oriented climate. Even though this is evident, it must be noted that the motivational style of the athlete must also be taken into consideration so that the coach and athlete will coordinate and produce optimal results.

This paper did not consider the other factors such as the gender, type of sport, other members of motivational climate, stage in sport, and age that could also affect the optimal performance of the athlete. Further studies are also recommended to make the study more accurate and applicable to different cultures and situations that athletes are in.

## **TABLE OF CONTENTS**

Introduction.....	4
Definition of Motivational Theories and Terms.....	5
<i>Motivational Climate</i> .....	5
<i>Achievement Goal Theory</i> .....	6
<i>Self Determination Theory</i> .....	6
<i>Optimal Performance</i> .....	7
Coach-Athlete Relationship.....	8
<i>Background</i> .....	8
<i>Relationship of Coach's Motivational Climate to Athlete's Goal Orientation</i> .....	8
Discussion.....	10
<i>Relationship of Two Motivational Theories</i> .....	10
<i>Task-Oriented Coaching Climate</i> .....	10
<i>Ego-Oriented Coaching Climate</i> .....	12
Analysis.....	14
Limitations of Study.....	16
Conclusion.....	18
Bibliography Page.....	19

## INTRODUCTION

In the Philippines, national athletes could be given more importance than they are at present. Competition performance has drastically dropped since the time of President Marcos in the 1960s; from being in the top to one of the lowest. Athlete motivation is one of the factors that could affect this. Rewards are the perceived motivators (things that they think could help motivate) by their parents and coaches and have continuously failed in having a better motivation. This paper would like to help by proposing an ideal motivational climate that a coach can employ in order for athletes to achieve optimal performance. Hopefully, after some time, athletes in the Philippines could be motivated better in order to achieve better results in competitions.

Sport Psychology is a relatively new field having a history of about 60 years. Sport psychology is defined as the study of people and their behavior in sport and exercise setting (Tod et al., 2010). In recent years, motivation of athletes has been a constant topic. Motivation can be defined as “the hypothetical construct used to describe the internal and or external forces that produce the initiation, direction, intensity, and persistence of behaviour.” (Vallerand and Thill, 1993: 18, translated) Motivation allows sport analysts, coaches and even psychologists to know the pattern and behaviour of the athletes. This will allow them to adjust their interpretation, therefore, having a different approach to different people. This paper will attempt to discuss, through various studies and experiments that have been conducted, what the relationship of the motivational climate created by coaches with athlete achievement goal orientation is to the optimization of performance of the athletes.

## DEFINITION OF MOTIVATIONAL THEORIES AND TERMS

### **Motivational Climate**

Motivational climate refers to the environment created by coaches, parents, umpires, and administrators that affects athletes' behaviours and achievement strategies (Boixados et al, 2004). For this paper, the focus would be on the coach's motivational climate style.

According to Ames (1992), Motivational climate has two types: task (or mastery) climate or ego (or performance) climate. Task climate would focus on coaches motivating the athlete through realistic goals. It emphasizes goal setting, congratulating for improvement, and giving feedback, encouraging effort and rewarding when mastery of task is achieved. An evidence of this would include focusing on the athlete's improvement; encouraging people involved in the motivational climate to support the athlete.

On the other hand, ego climate would focus on motivating the athlete by normatively comparing them with other athletes. An evidence would include the coach pressuring the athlete to show his competence by means of being better than others, comparison to others, promoting luck, and being very competitive. An evidence of this would include testing of competence and norm-referencing.

Though these two orientations are deemed as separate when talking about it, it must be noted that they co-exist. These two are classified according to the level it has on the coach (e.g. low, moderate, high). This means there is no such thing as zero ego/task climate (Vazou et al., 2006).

According to Duda and Balaguer (2007), research on motivational climate suggests that employing task climate has a positive effect on athletes while employment ego climate results in negative sport experiences.

## **Achievement Goal Theory**

John Nicholls' achievement goal theory (1989) is one theory in motivation that will be used in this paper. Nicholls' stated that there are two achievement goals termed as "task orientation" and "ego orientation." This specific motivational theory will focus on the athlete.

According to Nicholls' (1989), being task oriented would focus on achieving particular goals based on improving skill or knowledge in a particular area and usually involves collaboration with others. Athletes manifesting task-orientation would want to be referenced to their previous personal bests, set achievable and realistic goals, and is particular about effort rather than luck.

On the other hand, being ego oriented would focus on self in comparison by others, therefore aims to establish superiority over others. Athletes that manifest ego-orientation would want to be in competitions, beating others, and gets excited and satisfied when winning.

Though there is a distinction in the way that the goal orientation is demonstrated, it must be noted that these orientations can be measured at the same time. (e.g. high task/low ego, low ego, high task, low task/low ego, etc.)

## **Self Determination Theory**

Ryan and Deci's Self Determination Theory (2000) is the another theory in motivation, based on the athlete's point of view, that will be used in this paper. Ryan and Deci argued that there are two types of motivation termed as "intrinsic motivation" and "extrinsic motivation."

According to Ryan and Deci (1985), intrinsic motivation would entail the athlete doing the sport for their own sake, simply wanting to become better or beating his personal best. According to Biddle & Mutrie (2001), Intrinsic motivation is the key in sustaining involvement in sport and physical activity. Achieving intrinsic motivation will also require achieving three psychological factors namely autonomy, competence and relatedness. Increasing or decreasing intrinsic motivation would depend on how the athlete perceives the stimuli given.

On the other hand, extrinsic motivation would entail the athlete doing the sport due to something external. Extrinsic motivators would include the athletes receiving both monetary and nonmonetary rewards, providing the athlete with scholarship, and praising the athlete. Effects would include dropout in sport, anxiety and competitiveness.

### **Optimal Performance**

Performance is considered the result of the motivational climate and motivation that the athlete has. Optimal Performance refers to the best performance that the athlete can deliver given his situation, environment and efficiency.

## **COACH-ATHLETE RELATIONSHIP**

### **Background**

The coach is who the athlete sees everyday. He is the instructor and the mentor of the athletes. He is the person who the athletes go to when they set their goals, talk to them about problems, ask for guidance and ask for motivation. He is also the person who influence the athlete the most (Amorose, 2007; Smith et al., 2007). Different coaches use different styles of coaching due to their background, scientific knowledge or maybe experiences. He is the leader in which the athletes look up to and find inspiration. With the premises stated, coaches are one of the most important personalities in the sport context. Without the coach, the athlete would not exist.

### **Relationship of Coach's Motivational Climate to Athlete's Goal Orientation**

The strategy that the coach employs towards athletes is one of the factors considered for the motivational climate of a specific athlete. According to Deci, Nezlek & Sheinman (1981), there are two types of behaviour that coaches can employ; one of which is controlling pattern of behaviour while the other is autonomy pattern of behaviour. According to R. Keegan et al.'s (2010) study, coach's behaviour would include leadership style, and affective responses and pre-performance motivation behaviours.

Coaches also have a task or ego way of motivating the athletes. According to Roberts and Harnish (1998), a task oriented climate would increase the level of self-esteem and physical self-worth of the athlete. This is conceptually true given that the environment is less comparative to other people and there is a sense of improvement in one's capabilities. On the other hand, a coach that upholds an ego oriented would decrease self-esteem and physical self-worth. This is conceptually true given that normative comparisons are done. Another effect of an ego oriented

climate is increase in anxiety. According to Pensgaard and Roberts (2000), the athletes found that the coach was a source of stress given that there are comparisons to others that are made.

## **DISCUSSION**

### **Relationship of the Two Motivational Theories**

In terms of the relationship between achievement goal theory and self-determination theory, a relationship can be noted between intrinsic motivation and task orientation. Duda et al (1995) studied beginner tennis players and found that people who were enjoying their sport (i.e. tennis) and perceived their sport to be interesting reported higher task orientation.

On the other hand, there were athletes that reported low in enjoyment and interest and they were categorized under the ego orientation. An ego orientation, given that it aims to demonstrate ability and superiority over others, lowers the intrinsic motivation of an athlete.

### **Task-Oriented Coaching Climate**

Based on the research (Allen, 2003) conducted by the researcher, task-oriented coaching climate leads to the following effects: First, in the study of Boixados et al., Ntoumanis and Duda, the athlete perceives himself to have competence in the sport. This will allow the athlete to want to do the sport since he is improving. The co-relation to intrinsic motivation is seen here, as there is a strong desire to do the sport intrinsically, in this case, improvement. Encouraging the athlete would allow the athlete to feel that he is supported by someone, in this case the coach.

Second, there is a belief that effort will bring success, according to studies by Seifriz et al. and Treasure. This is important because if the athlete will always believe in his or her luck, there is a possibility that results might not be as good as they want it to be. This will allow the athlete to experience anxiety, since the athlete will want to see himself better than others. If the athlete would take his effort, he will make goals based on his predicted performances due to training, and this will make him want to keep on improving.

Third, there will be a greater enjoyment and satisfaction towards the sport. These can be seen in repeated experiments done by Boixados et al., Valiente, Carpenter and Morgan, Ntoumanis and Biddle, Seifriz et al., Smith, Balaguer and Duda, Treasure, Vazou, Ntoumanis and Duda and Walling et al. These enjoyment would be the things that would keep the athlete in the sport. Positive indicators of intrinsic motivation can also be seen in this context. This will allow the athlete to also want to improve. Satisfaction is also what will keep the athlete. The athlete will always look for ways to gain that satisfaction, ergo, always go to the sport.

Fourth, the athlete when dealing with other people will be more positive. A positive relationship with peers (Ommundse et al.) and positive moral functioning and sportsmanship (i.e. following rules, officials and less rough play) as stated found in studies by Boixados et al., Gano-Overway et al., Guiveranau and Duda, Ommundsen et al. and Miller et al. Behaving and being fair in terms of dealing with others is the most important thing when in a competition. This will show who the athlete is, what the culture is and this represents the image of the team the athlete is representing. These things define who the athlete is and respect will be seen in the athlete. Also, fostering a work ethic will be seen (Ommundsen et al.). This will allow the team to be trusted on, while enjoying and taking care of other people.

Finally, a studies done by Balaguer, Crespo and Duda, Balaguer, Duda and May, Smith et al, Gardner allow the athlete to perception that the coach gives positive feedback and support. This will allow the athlete to trust in his or her coach more. Trust in the coach would allow the athlete to be closer to him or her. This will allow the athlete to perform better in the sport given that there is a specific amount of trust in both channels.

Given all these advantages, there is a disadvantage that a task-oriented climate can have. They would just want keep on improving based on his personal best. There is danger that the athlete might not fare well in competition. This can then lead to negative effects like anxiety.

## **Ego-Oriented Coaching Climate**

Based on the research (Allen, 2003) conducted by the researcher, ego-oriented coaching climate leads to the following effects: First, there is a certain belief among athlete when ego-orientation is used that ability is more important in the determination of sport performance (Seifriz et al.). When ability is promoted more rather than effort, there is going to be social comparison, a great need for the athlete to always outperform the others. In trusting ability, there is also a need for trust in luck for the athlete. This can make him or her trust in this so much that the effort to train is not seen. Also, there is a possibility that because of social comparisons, there will be peer conflicts in the team that the athlete is in (Ommundsen et al.). Peer conflicts destroy relationships among athletes and friends. This in turn will have a great effect on the athlete. This will be further discussed in the peer-athlete relationship analysis. Much of this will then translate to higher levels of anxiety.

Second, a perception of a more controlling and autocratic coach can be felt (Balaguer et al., Smith et al.). Having a more controlling coach will allow the athlete to be more restricted with what he is doing. He does not have the opportunity to see new things in different perspectives given that the environment is very controlling. Sometimes, there might not even be a relatedness in the task given to the athlete. This could allow the athlete to not want to participate in the sport and there is also a sense of distance in terms of the coach-athlete relationship. This can induce higher levels of anxiety and at the same time, worries for the athlete.

Third, as stated above, a higher level of anxiety and performance-related worries can be seen (Ntoumanis and Biddle, Papaioannou and Kouli, Pensgaard and Roberts, Walling et al.). High anxiety would allow athletes to be sad, train less and can affect his or her performance in whatever he or she is doing. This is because there is a feeling that one should fulfill the requirements of the coach as regards to becoming better than the others. There is also a worry that the athlete training

needs to be more and this could lead to not enjoying training. More and more extrinsic motivators might also be needed given that it would allow the athlete to be happy in the short-term.

Fourth, when the high level of anxiety stated above repeats itself and becomes worse, there is a great risk that the athlete would drop out of the sport (Ommundsen et al.). Dropping out of the sport would involve a lot of waste in the part of the athlete. A lot of investment in terms of sport equipment, time and effort are wasted. Dropping out would also cause social conflicts and problems.

Finally, there is also a possibility that athlete moral functioning will be less mature (Kavussanu et al., Ommundsen et al.). This will have a great effect on the part of the image and the reputation of the athlete and the team that he is in. Low moral functioning will allow the athlete to be very aggressive in terms of judging since he wants to be always better than other athletes.

Another literature states that even though ego orientation can bring negative effects, there is a positive contribution, namely the athlete being eager to want to compete without being ashamed or scared to compete (Cervello, Escarti, and Guzman, 2007).

## ANALYSIS

In the discussion above and based on the research done by the researcher, it would seem that task-oriented motivational climate is more advantageous given the numerous positive results it had; but it must be noted that ego-oriented motivational climate does have an advantage also even though majority of the research would yield negative results. The coach cannot just simply put on a certain type of motivational climate since there are different types of athletes. One coach cannot just simply adapt a certain motivational climate without knowing his or her athletes. The nature of the athletes, the culture, location, gender, background of the athletes must be taken into consideration. According to Duda and Balaguer (2007), "the experience of personal improvement and the exertion of high effort will not result in high perceptions of competence, if ego goals predominate." With this said, the importance of fundamentals tenets of motivational climate must noted. One must first perform up to his or her potential given the level of capability he or she has. In ego-orientation, an athlete must first have high competence in order positively motivate the athlete. If he or she is just focused on the demonstration of ability without competence, then a negative outcome will occur.

Another thing to note is that even task-orientation seems to look better, based on the studies, there are implications towards this. Competition enables optimisation of performance and the lack of this can limit the development of the athlete. The problem of being stuck in the level right now and not improving is possible. A consequence of this would be something on optimising performance. What if there is no competition? Would that mean that athletes would not improve since there is no definite or tangible thing to conquer?

Competition is not necessarily bad. Competition can bring about good things like improvement of skills and abilities. Therefore, a competition is still a means to achieve task-orientation. The use of competition must be used carefully in achieving task-orientation. The ability of the athlete and his competence must first be firm or stable before entering into competition. This,

therefore, would allow the athlete to check if his performance is enough under the environment of a competition. This will then be used by the coach or the athlete to check what to improve on. If used wrongly (i.e. competition without competence), a negative response can be seen. This therefore leads to the negative aspects of competition.

Another aspect is the intrinsic and extrinsic motivation. Intrinsic motivation is stated to bring task-orientation to the athlete. Now, what if the athlete is really extrinsically motivated? What will happen if the coach forces him to just personally compare himself? A lack of coordination could therefore lead to bigger problems such as the athlete not liking the coach. Therefore, it can lead to dropout in sport. It must be noted that the athlete will have a hard time adapting to the coach or the authority and this could lead to disagreements.

In all of these things, it is imperative that the coach knows who his athlete is. By knowing who his athlete is (in the form of personality, motivational style, environment, culture, age, background, level, etc), then the coach can provide a proper form of motivation. It must be noted that the topic being talk about is the overall performance of the athlete and NOT the attitude of the athlete in the sport. According to Cumming et al. (2007), winning does not relate to enjoyment. It can be possible that the athlete keeps on winning yet he is not happy about what he is doing.

In contrast, it must also be noted that it is possible that the optimal performance of the athlete could only stay for the short-term. Given that there are consequences of adapting an ego oriented motivational climate, the possibility of having excessive pride of the athlete and not being able to train or to practice can occur. This thus leads to the argument that an athlete must first achieve a high task oriented climate together with intrinsic motivation then only can the athlete be ego oriented. This will allow the athlete to not lose his competence, one of the fundamental needs of the athlete in terms of having an ego orientation.

## LIMITATION OF STUDY

The setting of stimuli to the athlete would now be based on the motivational climate that the athlete has. First, in this paper, the focus will be on the coaches. There are still other factors that could influence the motivational climate of the athlete namely the people involved (e.g. parents, peers). These people also share a majority of the motivational climate of the athlete.

Second, Gender does have a great effect on athletes that choose their motivational climate. Males tend to have a more ego-involved climate (Vazou et al., 2006). This is given that there are instances where males tend to compete more and these are also done with friends. On the other hand, females would have a more task-involved climate.

Third, according to Cote et al. (2003) and Wyllenman et al. (2004), athletes are categorised into different groups when talking about their stage in the sport. The first is the initiation stage where athletes try different sports. After this stage, specialising would be involved and this would mean that the athlete would choose one or two sports that they would specialise into. This will take in the age of approximately 11-12 years old. Third, is the investment stage where they begin to focus and develop their skills in one sport. The last stage is the retirement stage (Cote et al., 2003) or maintenance stage (Wyllenman et al., 2004). In each of the stages, there is a change in the way that each coach should approach the athlete. There is also a different motivational climate that the athlete is looking for. On the other hand, the peers also have a different role in each stage. In the stage, a change in the way of motivating is also seen.

Fifth, Age does have a slot in the motivational climate of athletes. The way that each age should be motivated depends on the needs and wants of the athlete. A younger aged athlete would want to be positively disposed toward sport and physical activity. On the other hand, physical activity declines steeply in adolescence (Wang and Biddle, 2001).

Finally, sport psychology is a relatively new field, in where athletes are tested. Most of the theories, if not all, start from educational psychology. The limitation here is that not all athletes are

at the same mindset as students. Majority of the studies were done in Europe and Americas, there is a lack of Asian samples. The main disadvantage here is that the cultural aspect of psychology is not addressed and results can vary.

## CONCLUSION

The different styles of motivational technique and climate created by coaches definitely has an effect on the athletes. The choice of either task or ego orientation climate can affect the athlete in terms of staying and enjoying the sport or when the unexpected happens, there can be a drop of sport on the part of the athletes. Though these factors are a big factor to the athlete's motivation, other factors suppose to be noted. The culture, age, type of sport, level in sport, personality of athletes affect the optimal performance of the athlete. Now to answer the research question of "What Motivational Climate Should a Coach Employ in Order to Achieve Optimal Performance in Athletes?" In answering this question, one must first understand the nature of the athlete and the coach. There should be an understanding taken by the coach as to how to motivate the athletes. They should know who their athletes are and what styles are used in order to motivate them. The coach is not wrong when he adapts an ego-oriented motivational climate if his athletes are naturally ego-oriented. A coach who does not understand his athletes and how to motivate them would greatly affect the performance of the athletes.

Though this study has related literature to back it up, there is a big limitation since sport psychology is a relatively new area of psychology and there is not enough literature to support the study in terms of the culture. These studies that are done are basically from the American to European culture not the Asian culture.

## BIBLIOGRAPHY PAGE

- Allen, J. (2003). Social Motivation in Youth Sport. *Journal of Sport & Exercise Psychology, 25*, 551-567.
- Ames, C. (1989). Classrooms: Goals, Structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.
- Balaguer, I., Duda, J., Atienza, F., & 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.
- Boixados, M., Cruz, J., Torregrosa, M., & Valiente, L. (2004). Relationships Among Motivational Climate, Satisfaction, Perceived Ability, and Fair Play Attitudes in Young Soccer Players. *Journal of Applied Sport Psychology, 16*, 301-317.
- Cumming, S., Smoll, F., Smith, R., & Grossbard, J. (2007). Is Winning Everything? The Relative Contributions of Motivational Climate and Won-Lost Percentage in Youth Sport. *Journal of Applied Sport Psychology, 19*, 322-336.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Duda, J., Chi, L., Newton, M., Walling, M., & Catley, D. (1995). Task and Ego Orientation and Intrinsic Motivation in Sport. *International Journal of Sport Psychology, 26*, 40-63.
- Jowett, S., & Lavalley, D. (2007). Coach-Created Motivational Climate. *Social psychology in sport* (pp. 117-129). Champaign, IL: Human Kinetics.
- Keegan, R., Spray, C., Harwood, C., & Lavalley, D. (2010). The Motivational Atmosphere in Youth Sport: Coach, Parent, and Peer Influences on Motivation in Specializing Sport Participants. *Journal of Applied Sport Psychology, 22*(1), 87-105.

- Law, A., & Halkiopoulos, C. (2010). *Psychology: developed specifically for the IB diploma*. Oxford, U.K.: Pearson Education.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, Mass.: Harvard University Press.
- Ommundsen, Y., Lemyre, P., Abrahamsen, F., & Roberts, G. (2010). Motivational Climate, Need Satisfaction, Regulation of Motivation and Subjective Vitality: A Study of Young Soccer Players. *International Journal of Sport Psychology*, 41, 216-242.
- Petherick, C., & Weigand, D. (2002). The Relationship of Dispositional Goal Orientations and Perceived Motivational Climates on Indices of Motivation in Male and Female Swimmers. *International Journal of Sport Psychology*, 33, 218-237.
- Rhind, D., Jowett, S., & Yang, S. (2012). A Comparison of Athletes' Perceptions of the Coach-Athlete Relationship in Team and Individual Sports. *Journal Of Sport Behaviour*, 35(4), 433-452.
- Roberts, G. C. (2001). Enhancing Motivation in Psychological Activity. *Advances in motivation in sport and exercise* (pp. 101-128). Champaign, IL: Human Kinetics.
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being.. *The American Psychologist*, 55(1), 68-78.
- Vallerand, R. J., & Thill, E. (1993). *Introduction à la psychologie de la motivation*. Laval, Québec: Éditions Études vivantes.
- Vazou, S., Ntoumanis, N., & Duda, J. (2006). Predicting young athletes' motivational indices as a function of their perception of the coach- and peer-created climate . *Psychology of Sport and Exercise*, 7, 215-233.
- Wang, C. J., & Biddle, S. J. (2001). Young People's Motivational Profiles in Physical Activity: A Cluster Analysis. *Journal of Sport and Exercise Psychology*, 23, 1-22.