

Extrinsic motivation

In comparison, those who are extrinsically motivated are motivated from an external source. That means they will participate in an activity to attain separate outcomes. These outcomes for athletes could include tangible rewards such as trophies and money (which should be used sparingly with young athletes because they will associate winning as being more important than their effort and the process), They could also include intangible rewards, such as social approval, recognition and praise. This is why praising effort, the process and what the athlete is doing well is so important.

Amotivation

“Amotivation is associated with a lack of interest in an activity and may lead to decreased participation in that activity” (Mallett, 2005, p. 418).

Self-determination

Deci and Ryan (2000) suggested that there is continuum of extrinsic motivation, with each type differing as a function of the level of a person’s self-determination. Figure 8 shows these four different types of extrinsic motivation. It also provides examples of amotivation, intrinsic and extrinsic motivation. It is likely that elite athletes are both internally and externally motivated. This is reinforced by Jackson, Anshel, Grove, and Fogarty (2000), when they say that both intrinsic and extrinsic motives are potentially operating when individuals make decisions about participating in physical activity or sport.

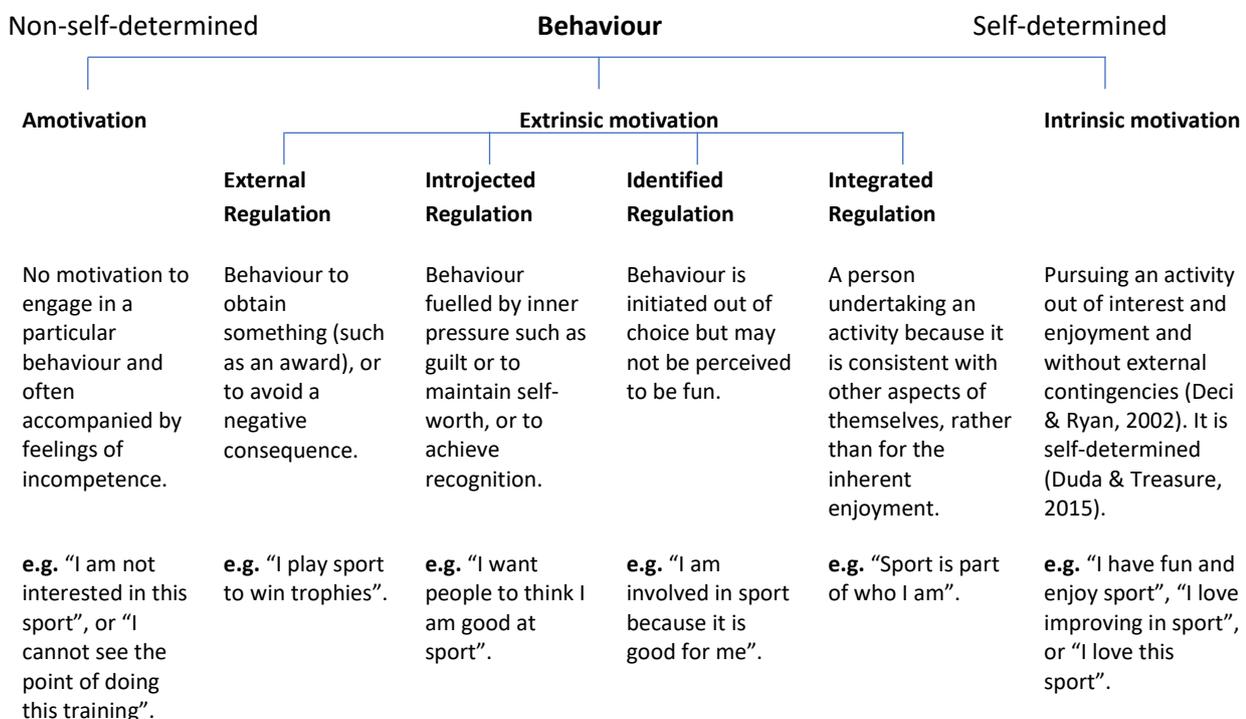


Figure 8: The range of motivation from non-self-determined through to self-determined

Motivation research

There has been quite a lot of research on athlete motivation. For example, Pope and Wilson (2012) concluded that athletes who perceived their coaches as empathetic were able to receive more motivational benefits. Thus, being empathetic to your athletes helps their motivation. Further, Jöesaar, Hein and Hagger (2012) found that when athletes are given more choice and control, they are more intrinsically motivated. Therefore, giving your athletes some autonomy (choice) is important to developing their intrinsic motivation.

Vansteenkiste and Deci (2003) also discovered that not only is positive performance feedback essential for maintaining intrinsic motivation, it can also counteract the negative effects of losing a competition. Thus, not only does positive feedback maintain motivation, it also helps your athlete after a loss. A further study found that self-determined motivation positively predicted the use of task-oriented coping strategies during a competition (Amiot, Gaudreau, & Blanchard, 2004). Other research found that athletes whose motivation was becoming less self-determined across a season scored higher for burnout than athletes with positive motivational trends (Lemyre, Treasure & Roberts, 2006).

It is important to understand the motivation of your athletes. I once made the mistake of not doing this in a group tennis lesson. I was getting frustrated when I perceived the athletes as being too social, talking too much and not working as hard on improving their techniques as I wanted them to. I eventually realised that their motivation was not to be world-beaters but to have a social lesson where they got to spend time with their friends and make new ones. Once I worked that out, I enjoyed the sessions more and the athletes certainly did as well because I wasn't getting frustrated with them. I also developed more activities where they could work together with their peers and friends.

Self-determination theory (or the motivation trifecta)

Leadership (as a coach) is not about getting your athletes to do things, it is about getting them to want to do things (Haslam, Reicher & Plastow, 2011). When you do, you will have athletes who are self-determined. According to self-determination theory, "self-determined behaviours are emitted out of choice and pleasure, because they allow the attainment of important goals, and because they are coherent with one's values" (Amiot et al., 2004, p 398).

Self-determination theory proposes that humans have three basic psychological needs that are crucial for understanding human motivation. These are:

- autonomy,
- competence or mastery, and
- relatedness or connectedness.

Autonomy is the desire to be self-directed and self-organised. Competence or mastery is the need to be able to undertake the skill correctly and having the opportunity to express capabilities and have some success (which is great for building confidence). Relatedness is the need to be connected to others and have a sense of belonging. Meeting each of these needs is thought to promote and facilitate the development of intrinsic motivation (Ryan & Deci, 2000). Satisfaction of these three needs is thought to promote and facilitate motivation through the development of more intrinsic motivations, which in turn underpins task persistence (Ryan & Deci, 2000). For example, McDonough and Crocker (2007) found that competence, relatedness and autonomy significantly predicted self-determined motivation in adult dragon boaters. Figure 9 shows the motivational sequence in self-determination theory. Mageau and Vallerand (2003) have suggested that certain coach behaviours promote psychological needs in athletes, including offering choices, providing rationales for tasks and limits, and providing structure.

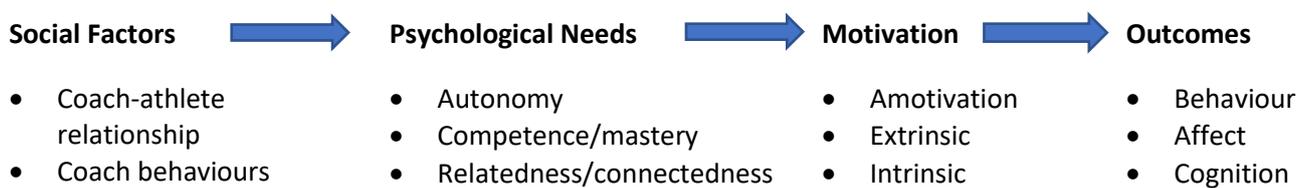


Figure 9: Motivational sequence (adapted from Vallerand & Cosier, 1999).

Practical coaching strategies to increase the self-determined motivation of your athletes

Strategies to increase autonomy, competency/mastery and relatedness/connectedness are outlined on the following pages (note: we covered mastery opportunities in the confidence chapter, but this content is repeated here because motivation and confidence are interrelated concepts).

Provide autonomy and choice opportunities for your athletes

The need to form social bonds with others has been described as a fundamental human motive (Baumeister & Leary, 1995). Research has revealed that the more athletes perceive their coach provides them with choices (their coach is autonomy-supportive), the more their motivation for practising their sport-specific activity will be self-determined (Gillett et al, 2010). Basically, if we force someone to do something, it is hard for them to internalise motivation. That is why we should not give external rewards (including bribery) for activities. Low levels of perceived autonomy have also been linked to increased feelings of stress, anxiety and self-criticism (e.g. Gagne, Ryan & Bargmann, 2003; Krane, Greenleaf & Snow, 1997). Thus, it is important to provide an autonomy-supportive environment, which was also highlighted in the first chapter on developing confidence.

In addition, if we go back to Figure 5 (in the self-talk chapter), your athlete's motivation may increase if they choose to change their thoughts (e.g. "I can do this"), behaviour (e.g. good body language), feelings (e.g. from anger to determined). Likewise, a change of environment may increase motivation.

According to Ahlberg, Mallett and Tinning (2008), coaches can provide an autonomy-supportive environment by:

- providing your athletes with choices. For example, "Which game would you like to finish with?"
- giving a meaningful rationale for tasks to athletes.
- acknowledging the feelings and perspectives of your athletes.
- providing your athletes with opportunities for initiative-taking and independent work.
- giving information and feedback to your athletes about their competence on a task or skill. Vansteenkiste and Deci (2003) found that positive performance feedback was essential for maintaining intrinsic motivation, and that it can also counteract the negative effects of losing a competition.
- avoiding controlling behaviours.
- creating a task-focused environment, where the focus is on effort and improvements through training and hard work (rather than an ego-focused environment).
- involving your athletes in decision-making.
- asking questions of your athletes.
- providing your athletes with the opportunity to coach each other.
- giving them responsibility.
- encouraging your athletes to come up with a team name when they break into smaller training groups. I have found that they love doing this, particularly younger athletes.

Provide mastery (success) opportunities for your athletes in training sessions

"Strong efficacy expectations can be developed through repeated successful performances of a task, whereas repeated failures can lower efficacy expectations" (McKenzie & Hale, 1997, p. 197).

Self-determination theory views the achievement and striving towards competence as central to one's motivation and interest/enjoyment in participation (Weinberg, Tenenbaum, McKenzie, Jackson, Anshel, Grove, & Fogarty, 2000). An athlete who has opportunities to master skills is likely to be interested and open to learning new skills. Research evidence suggests that a focus on mastery and fun/enjoyment brings the most positive motivation outcomes (Goudas, Biddle, & Fox, 1994). While Vallerand and Reid (1984) suggested that an increase in perceived competence leads to increased levels of intrinsic motivation. Also, Weigand and Broadhurst (1998) found that children "who perceived themselves to be competent in soccer were

intrinsically motivated to play soccer, perceived themselves to be primarily responsible for their successes and failures, and indicated they knew the reasons why they succeeded and failed in soccer” (p. 333). Further, the contextual environment or climate that the coach creates via their interpersonal style is especially influential on athlete motivation and subsequent behaviour (Gagne, Ryan & Bargmann, 2003). Likewise, strong mastery climates were associated with athletes reporting greater performance improvements and satisfaction with their performance (Balaguer, Duda, Atienza, & Mayo, 2002). The following provides some strategies for mastery opportunities for your athletes. It is worth noting that these are also provided in chapter one.

Match the activity to the child, not the child to the activity

It is important to match the activity to the athlete and not the athlete to the activity (Weiss, 2000), this is why most sports have developed resources and games that are played on smaller courts or with lowered goals. It helps the less developed athlete to achieve mastery in line with their ability, through touching or hitting the ball more. It provides opportunity to develop skills that aid learning and development.

Practice matches

Creates situations where the athlete can experience success.

Skill progression instruction and activities

Helps to ensure performance improvements through building on athlete’s abilities.

Feedback

Feedback about correct performance motivates athletes to keep trying (Magill, 2004).

Use video of your athletes performing successfully

Self-modelling (seeing images of self) can influence an athlete’s self-efficacy by reminding them that they have been successful on the task before, “I did it before, I can do it again” (Ram & McCullagh, 2003).

Set specific performance goals

Helps to ensure performance improvements. For example, ask your athletes “What technique are you going to work on in the session?” Help them to be as specific as possible and define what success will look like. It’s one thing for an athlete to say, “I am going to work on my free throws”, but another to define what the end goal might be. For example, a more specific performance goal would be “To sink five free throws in a row by ‘taking biscuits out of the biscuit jar’”. Confidence will increase when your athletes achieve their goals.

Ensure all your athletes have some success within your training sessions

This doesn't mean every athlete should have success for every aspect of your session, but they should all experience some form of success during training.

Replicate and introduce variable competition situations into training

This will increase your athlete's confidence when they have to do it for real (i.e. in competition) when different variables come into play.

Ensure your athletes compete in appropriate levels of competition

If they compete at a level that is too hard, they may become anxious. If the level is too easy, they may become bored. Either way, they may not stay involved in the sport.

Explain success and failure

Coaches should explain why their athletes fail and succeed, as Weigand and Broadhurst (1998) suggest that not knowing the reasons for success or failure may inhibit competence and increase the need to focus on extrinsic sources of information.

Fun activities

Enjoyment is "a positive affective responses to the sport experience that reflects feelings and/or perceptions, such as pleasure, liking and experiencing fun" (Scanlan, Stein, & Ravizza, 1989).

Ensure your training sessions are relevant

Ensure training sessions leading up to competitions cover what the athletes will be required to do to perform effectively.

Provide relatedness and connection opportunities for your athletes:

"One of the fundamental characteristics of humanity is the need to belong. When this need is satisfied, we feel positive emotions" (Boniwell, 2015, p. 53).

Feeling connected to others involves building strong relationships and having a sense of belonging, and friendships are a strong predictor for sport participation (Allen, 2003). The need for relatedness is satisfied when people authentically connect with others and feel involved in the social context (Deci & Ryan, 1991). Relatedness is essential for optimal social and emotional development (Baumeister & Leary, 1995). You can help your athletes to feel connected by:

- Encouraging them to bring a friend to training sessions so they can train together.
- Emphasise group goals and team work.
- Enhancing peer relationships by allowing time for social interaction. For example, letting your athletes be with their friends during training and allowing them to socialise and make new friends before and

after training or during drinks breaks. You could also organise social get-togethers, such as barbecues during the season or at the end of the year.

- Encourage peer reinforcement, through positive comments from team mates.
- Include cooperation games and team-building activities in your training sessions. These activities could focus on developing the communication skills of your athletes as well as their awareness of their team mates.
- Having fun and being enthusiastic. Your energy levels and enthusiasm as a coach will be contagious. Fun and enjoyment have been acknowledged as a foundation of motivation in sport (Scanlan, Carpenter, Lobel & Simons, 1993). Likewise, with females dropping out of sport during adolescence, creating a fun environment where athletes are making new friends or being with friends may keep your female athletes involved in sport longer.
- Listening for laughs. If your athletes are laughing and having fun working and training together, their feelings of relatedness are likely to be solid.
- Creating a safe and respectful environment. This will help your athletes feel emotionally secure and comfortable.
- Keeping everyone active. Try to ensure your athletes spend as little time waiting around as possible during training.
- Encourage athletes who are training or competing in a new environment to meet new people. This could include teaching them to say “hello, my name is...”, while putting their hand out to shake hands.

I recently saw the parents of a young man (James, not his real name) that I coached in group sessions for ten years from the time he was eight years old. James is now 24 years old and working. His parents mentioned that his best friend was someone he met in his weekly tennis lesson and that it was one of the reasons he came to tennis each week. Knowing this is something I am very proud of.

Other practical strategies for influencing motivation in your athletes

There are many other practical strategies outlined below that you can use to motivate your athletes. Experiment and find out which ones work best for your different athletes.

Ask your athlete

Find out what motivates your athlete to play their sport. You can ask simple questions like, “What motivates you to play your sport?” (and then encourage them to come up with examples of when they experienced these motivations in their sport), “Why do you play your sport?”, “What do you like (and dislike) about your sport?”, and “What could I do to help you keep motivated?”

It is important to know the reasons why your athletes play their sport. You should then try to include some of these factors (where possible) into your training sessions, though this can be difficult, especially when your athletes have a diverse range of motivations.

Use language that motivates

Instead of saying, “You tried hard”, use effort-based language instead like, “I really liked how hard you worked then, your footwork was great and you got into the right position”. When you say, “You tried hard”, your athlete may perceive the comment as though they weren’t good enough or they haven’t improved. This type of negative perception will be discussed further in the chapter on mindsets.

Provide options

Motivational research indicates that people with two choices have greater commitment than people with one, and those with three choices have even greater commitment, However, four choices does not further enhance willpower.

Set goals

I mentioned setting goals in the section on creating mastery opportunities, but it is worth mentioning again. Goal-setting is one of the most important ways to keep your athletes motivated, provided the goals are their own. Remember to encourage your athletes to have long-term, medium-term and short-term goals with a combination of process, performance and outcome goals, which can ultimately benefit their motivation.

Whatever you can do, or dream you can do, begin it. Boldness has genius, power and magic in it. Begin it now.
- Attributed to W. H. Murray (Scottish mountaineer and writer).

Use motivational reminders

Encourage your athletes to develop a motivational reminder. This could be a picture or photo, an affirmation, an object, or anything that reminds them of their goal.

Write down phrases/words/images for when it’s tough!

Ask your athletes to list some situations where they struggle or have motivational problems. For example, this could be when they are at the end of a hard training session or when they still must complete 100-metre sprints. Then get your athletes to come up with cue words/songs/images or phrases they could use to motivate themselves in these situations, such as the theme music to “Rocky”, the words “Go go go” or “Fire up!”. They could even develop a dream board where they put their images, words, quotes and song lyrics or whatever gets them going. Table 22 provides a template you could use for this exercise.

Table 22: Motivational strategies for dealing with tough situations

Situation	Cue words/phrases/images/songs
Example: Five am starts for swimming	Song: "Beautiful Day" (U2) Phrase: "I am the greatest".

The injured athlete

An injured athlete can lose motivation as they can lose all three aspects of the motivation trifecta quickly. It is important to keep the injured athlete in mind, for they may not be getting feelings of mastery in skill development, they can however get feelings of mastery from setting goals that relate to their rehabilitation, or factors away from playing, such as school or work goals, or obtaining coaching qualifications. They can maintain feelings of autonomy by giving them some choice in dealing with the rehabilitation, for example, 'you have the options of exercise A or exercise B today'. The sense of connectedness can be maintained by having them continue to attend training and social events, or depending on the injury they can be involved directly, for example, injured netballers could continue to be involved by simply having them sit on a chair and pass the ball to team mates for a drill.

Use music

When I won my first major. I listened to the same song every day on my way to the course. It played in my head over and over all the way around the course. So, whenever I want to remember that winning feeling, all I need to hear is that song.

- Rory McIlroy

Use music that your athletes feel is inspirational at training and before games. It could be loud or fast during work periods (such as circuit or interval training), and slow or soft during recovery periods. Research indicates that this approach increases work output, decreases perceived exertion and increases the positive experiences during the activity (Karageorghis & Terry, 1997). Songs could include: "Sunshine in my Pocket" (Justin Timberlake), "Beautiful Day" (U2), "Perfect Day" (Lou Reed), "Eye of the Tiger" (Survivor), "I Believe I Can Fly" (R. Kelly), "Gold" (Spandau Ballet), and so on.

Positive friends

Encourage your athletes to be with people who are supportive and encouraging. Explain to them that it is important to have peers who will not only help them achieve their goals, but also pick them up when they fall down. I have often heard the saying "You become who you hang out with". If this is true, try to make sure you and your athletes hang out with people who are motivated, positive and encouraging.

Encourage your athletes to make the most of every opportunity

This includes training sessions. It would be great if athletes could feel that they gave 100% to every session when training or competing. Halfway through a training session, ask them how hard they are working out of ten. If they are not working as hard as they could, ask them “What do you need to do to work harder?”

Act!

If your athletes carry themselves as though they are highly motivated, this can have a positive effect on their motivation (or energy or attitude – whatever you want them to work on). Encourage them to think about people who are highly motivated. For example, what is their body language or facial expressions? When they need to motivate themselves, you can have your athletes close their eyes, relax and breathe deeply while remembering these gestures and expressions. Think about this: smiling at yourself changes your mood, so imagine what moving with motivation could do for your athletes!

Create competition

For older athletes, you can develop competition within your training sessions. For example, this could be between or group of your athletes or you could have them compete against themselves (e.g. by trying to reach an appropriate target). However, remember that some of your athletes may want to be social rather than competitive with other athletes. For those athletes, having competitions is likely to increase their anxiety and stress. They may even soon stop coming to training. However, they can still compete against their own times/scores etc.

Reward achievement

When your athletes achieve their goals, make sure you acknowledge and reward them. Try and back it up by explaining the reason they achieved their goal in front of their peers or team mates. For example, “Well done for achieving your goal of improving your flexibility through doing your home program each day”.

Make room for information-based extrinsic rewards

According to self-determined theory (Deci & Ryan, 1985), the key aspect of using extrinsic rewards is that they reinforce the athlete’s sense of competence and self-worth. Thus, the extrinsic rewards you use with your athletes should be informational in nature rather than controlling (which can undermine intrinsic motivation). A suitable extrinsic reward should be presented in front of all potential recipients, such as “player of the match” or “most improved player”. Alternatively, a coach I know gives her junior athletes a peg to put on the bottom of their t-shirt when they listen well or concentrate on tasks.

An example (away from the sporting environment) of how giving controlling extrinsic rewards may backfire is when a parent gives a child money for doing a task or chore. The next time the child is asked to do the task or chore, they will ask “How much do I get?”. They most likely won’t do it again without the monetary incentive.

We can be diminished by rewards...distracting us from the intrinsic value of worthwhile activity.

- McKay (2013, p. 23)

Create confident athletes

According to Bandura (1986), “efficacy (confidence) expectations are a major determinant of people’s choice of activities, how much effort they will expend, and how long they will sustain effort in dealing with stressful situations” (p. 194). Therefore, to increase your athlete’s motivation, make sure you are working on increasing their confidence.

Summary

This chapter has explained how you can create self-determined, motivated athletes. It began by explaining the different types of motivation and some important research. A variety of practical coaching strategies was then provided for you to consider using with your athletes. In the next chapter, we will focus on building resilience.

Further reading

- Ahlberg, M., Mallett, C. J., & Tinning, R. (2008). Developing autonomy supportive coach behaviours: An action research approach to coach development. *International Journal of Coaching Science*, 2, 3-22.
- Allen, J. B. (2003). Social Motivation in youth sport. *Journal of Sport and Exercise Psychology*, 25, 551-567.
- Amiot, C. E., Gaudreau, P., & Blanchard, C. M. (2004). Self-determination, coping, and goal attainment in sport. *Journal of Sport & Exercise Psychology*, 26, 396-411.
- 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.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychology Bulletin*, 117, 497-529.
- Boniwell, I. (2015). Teaching children to be happy. *Psychologies Magazine*, July, 53.
- Conroy, D. E., Kaye, M. P., & Coatsworth, J. D. (2006). Coaching climates and the destructive effects of mastery-avoidance achievement goals on situational motivation. *Journal of Sport & Exercise Psychology*, 28, 69-82.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation as self-determination in Human Behaviour*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.). *Nebraska Symposium on Motivation: Vol 38*. Perspectives on motivation (pp 237-288). Lincoln, NJ: University of Nebraska Press.
- Deckers, L. (2005). *Motivation: Biological, Psychological, and Environmental* (2nd ed.). Pearson Education: Boston.
- Duda, J. L., & Treasure, D. C. (2015). The motivational climate, athlete motivation, and implications for the quality of sport engagement. In J. M. Williams & V. Krane (Eds.), *Applied Sport Psychology: Personal Growth to Peak Performance* (pp. 57-77). McGraw Hill: New York.
- Gagne, M., Ryan, R. M., & Bargmann, K. (2003). Autonomy support and need satisfaction in the motivation and well-being of gymnasts. *Journal of Applied Sport Psychology*, 15, 372-390.
- Gillet, N., Vallerand, R. J., Amoura, S., & Baldes, B. (2010). Influence of coaches' autonomy support on athletes' motivation and sport performance: A test of the hierarchical model of intrinsic and extrinsic motivation. *Psychology of Sport and Exercise*, 11, 155-161.
- Goudas, M., Biddle, S. J. H., & Fox, K. R. (1994). Perceived locus of causality, goal orientations, and perceived competence in school physical education classes. *British Journal of Educational Psychology*, 64, 453-463.
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The New Psychology of Leadership: Identity, Influence and Power*. Psychology Press: Howe, UK.
- Jackson, S., Anshel, S., Gove, R., & Fogarty, G. (2000). Motivation for youth participation in sport and physical activity: Relationships to culture, self-reported activity levels, and gender. *International Journal of Sport Psychology*, 31, 321-346.
- Jössaar, H., Hein, V., & Haggard, M. S. (2012). Youth athletes' perception of autonomy support from the coach, peer motivational climate and intrinsic motivation in sport setting: One-year effects. *Psychology of Sport and Exercise*, 13, 257-262.
- Karageorghis, C. I., & Terry, P. C. (1997). The psychophysical effects of music in sport and exercise: A review. *Journal of Sport Behavior*, 20, 54-68.
- Lemyre, P-N., Treasure, D. C., & Roberts, G. C. (2006). Influence of variability in motivation and affect on elite athlete burnout susceptibility. *Journal of Sport & Exercise Psychology*, 28, 32-48.
- Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: A motivational model. *Journal of Sport Sciences*, 21, 883-904.
- Magill, R. A. (2004). *Motor learning and control: Concepts and applications*. New York: McGraw-Hill.
- Mallett, C. J. (2005). Self-determination theory? A case study of evidence based coaching. *The Sport Psychologist*, 19, 417-429.
- Martin, N. J. (2014). Keeping it fun in youth sport: What coaches should know and do! Strategies. *A Journal for Physical and Sport Educators*, 27, 27-32.
- McDonough, M. H., & Crocker, P. R. E. (2007). Testing self-determined motivation as a mediator of the

relationship between psychological needs and affective and behavioural outcomes. *Journal of Sport & Exercise Psychology*, 29, 645-663.

McKay, H. (2013). *The Good Life*. Sydney: Pan McMillan Australia.

McKenzie, A. D., & Hale, B. L. (1997). The effect of imagery on self-efficacy for a motor skill. *International Journal of Sport Psychology*, 28, 196-210.

Pensgaard, A. M., & Roberts, G. C. (2002). Elite athletes' experiences of the motivational climate: The coach matters. *Scandinavian Journal of Medicine & Science in Sports*, 12, 54-59.

Pope, J. P., & Wilson, P. M. (2012). Understanding motivational processes in university rugby players: A preliminary test of the hierarchical model of intrinsic and extrinsic motivation at the contextual level. *International Journal of Sports Science and Coaching*, 7, 89-107.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Sage, G. (1977). *Introduction to Motor Behaviour: A Neuropsychological Approach* (2nd ed.). Reading, MA: Addison, Wesley.

Scanlan, T. K., Carpenter, P. J., Lobel, M., & Simons, J. P. (1993). Sources of enjoyment of youth sport athletes. *Pediatric Exercise Science*, 5, 275-285.

Scanlan, T. K., Stein, G. L., & Ravizza, K. (1989). An indepth study of formal figure skaters, II: Sources of enjoyment. *Journal of Sport & Exercise Psychology*, 11, 65-83.

Vallerand, R. J. & Cosier, G. F. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Psychology*, 11, 142-169.

Vallerand, R. J., & Reid, G. (1984). On the causal effects of perceived competence on intrinsic motivation: A test of cognitive evaluation theory. *Journal of Sport Psychology*, 5, 94-102.

Weigand, D. A., & Broadhurst, C. J. (1998). The relationship among perceived competence, intrinsic motivation, and control perception in youth soccer. *International Journal of Sport Psychology*, 29, 324-338.

Weinberg, R., Tenenbaum, G., McKenzie, A., Jackson, S., Anshel, M., Grove, R., & Fogarty, G. (2008). Motivation for youth participation in sport and physical activity: Relationships to culture, self-reported activity levels, and gender. *International Journal of Sport Psychology*, 31, 321-346.