

An Investigation of Expert Coaching Behaviours and Characteristics; Evaluating Athlete Perceptions across Various Sports

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Abstract

An expert coach is defined as a coach who can demonstrate coaching effectiveness on a consistent basis (Cote & Gilbert, 2009). The focus of this study was to examine athlete's perceptions of expert coaching behaviours across a variety of sports. The participants chosen for this study were elite athletes from team and individual sports. An elite athlete was defined as an athlete who had competed at national and/or international level within their sport. A total of 64 participants were asked to complete a modified version of the Coach Behaviour Scale for Sport (Cote, Yardley, Hay, Sedgwick & Baker, 1999) which examined athlete perceptions of coaching behaviours. The research questions for this study were:

1. What makes a good coach – athlete relationship?
2. Are athlete's perceptions of an expert coach consistent across sports?
3. Are coaching behaviours consistent across sports?

The participants completed the questionnaire detailing their coach's behaviours from a physical, technical, mental, goal setting, competition and a coach – athlete relationship perspective. Upon collection the data was analysed in SPSS using descriptive statistics and a Mann Whitney U test was performed to discover any statistically significant differences within the data. The results of the study showed there was a significant difference between individual and team sport athletes perceptions of their coach's behaviours; most notably in terms of the technical (Errors $p \leq .000$; Visual $p \leq .024$; Verbal $p \leq .001$; Understanding $p \leq .016$; Reinforcement $p \leq .002$) and coach – athlete relationship capacities (Outside sport $p \leq .002$; Approachability of the coach $p \leq .001$; Coaches listening skills $p \leq .002$; Coaches use of fear $p \leq .000$; favouritism $p \leq .002$). This study highlights the need for team sport coaches to improve their relationships with their athletes.

1. Introduction

An expert coach is defined as a coach who can demonstrate coaching effectiveness on a consistent basis (Cote & Gilbert, 2009). Coaching is about creating change in order to ensure an environment exists that is conducive to coach and athlete development (Felton & Jowett, 2012). The focus of this study was to examine athlete's perceptions of expert coaching behaviours across a variety of sports. Specific coaching behaviours have been found to have a positive impact on an athlete's development (Cote & Sedgwick, 2003). Fostering a culture of excellence and placing a high demand on the levels of commitment from athletes has been proven to be a method of achieving maximum performance through coaching behaviours (Donoso – Morales, Bloom & Caron, 2017). This study investigated whether there are similar behaviours adopted by expert coaches within different sports and if similarities exist in athlete's perceptions of how an expert coach behaves. In order to investigate this topic there are a number of areas which need to be reviewed and examined. These areas are; the coach – athlete relationship, leadership and relationship models, coaching behaviours and athlete perceptions. These areas were chosen for review as they contributed to understanding how current literature has investigated coaching behaviours to this point. Cohesion has often been cited as a factor connected to group performance (Turman, 2003). Coaching behaviours have been found to have a greater influence on team sport athletes coach satisfaction than individual sport athletes (Baker, Yardley & Cote, 2003). By examining these areas in depth a clear and developed understanding of the characteristics and behaviours of expert coaches can be established. This also allowed for comparisons to be made across sports to see if there are similarities in the behaviours exhibited by coaches across various team and individual sports.

The current literature in the area of coaching behaviours suggests that the type of sport an athlete engages in has an impact on the coach – athlete relationship. Rhind, Jowett and Yang (2012) found that individual athletes developed closer relationships with their coaches in comparison to team sport athletes due to increased contact time. Individual athletes perceived their coaches to exhibit more social supportive and positive behaviours in

comparison to team sport athletes (Aleksic - Veljkovic, Djurovic, Dimic, Mujanovic & Zivcic - Markovic, 2016). Establishing a positive coach – athlete relationship was shown to play an important role in the development and success of an athlete (Jowett & Cockerill, 2003). The coach – athlete relationship plays an important role in athlete development and overall performance, allowing coaches with a greater understanding of their athletes to achieve greater performance levels (Prophet, Martin, Singer & Coulter, 2017). Research has also found that combining coach leadership behaviours with a positive coach – athlete relationship is the most effective method for athlete development (Vella, Oades & Crowe, 2013). The research suggests that the coach – athlete relationship is a key element in the development of an athlete and that athletes competing in individual sports create more personal socially supportive relationships with their coaches. The main explanation for individual athletes forming this more personal coach – athlete relationship is the increased exposure to their coaches allowing for a more trusting respectful relationship to occur (Rhind, Jowett & Yang, 2012). This suggests that the sport an athlete engages in has an effect on the level of relationship that can be established with their coach. However positive coach – athlete relationships can be established in both team and individual sports and are a direct result of the behaviours adopted by coaches. In order for coaches to maximise their athlete’s performance they should aim to use coaching behaviours that are close to the preferred coaching behaviours of their athletes (Holgaard, Jones & Peters, 2008). Athletes prefer their coaches to exhibit positive supportive behaviours (Holgaard, Jones & Peters, 2008) and felt that the coach’s actions were the biggest indicator of whether they perceived the coach to be an expert (Becker, 2009).

This study aimed to identify the key attributes that expert coaches possess in order to establish relationships with each of their athletes and the methods they use to develop an elite environment for their athletes. Upon identifying these key behaviours this study aimed to establish whether these key behaviours were consistent across a variety of different team and individual sports. By establishing whether trends in coaching behaviours existed between different sports this study aimed to establish the types of coaching

behaviours that elite athletes prefer and the behaviours that elite athletes perceive expert coaches to show.

2. Literature Review

2.1 Coach Athlete Relationship

The coach - athlete relationship plays an important role in the development of an athlete as both a person and a performer, this in turn can lead to the success of the team and individual athletes (Jowett & Cockerill, 2003). The coach – athlete relationship is influenced by numerous intrapersonal and environmental factors such as the specifics of the sport (Poczwardowski, Barott & Henschen, 2002). In order to determine whether the coach - athlete relationship impacted on the success of Olympic medallists, Jowett and Cockerill (2003) investigated the perspective of Olympic medallists towards the coach - athlete relationship using the 3Cs (Closeness, Co-orientation and Complementarity) as predictors. In order to achieve this, 12 Olympic medallists (three females and nine males) were interviewed using open ended questions regarding their athletic relationship with their coach. The results found that feelings of closeness, such as trust and respect, thoughts of co-orientation, such as common goals, as well as complementary roles and tasks, marked their athletic relationships. Although the overriding themes of the relationships were positive, negative aspects such as lack of emotional closeness and complementary resources, which can be defined as the coach and the athlete working equally hard in achieving improved performance, emerged as well. Results showed that the coach - athlete relationship had an impact on the success achieved by the Olympic athletes which was underpinned by athletes creating a relationship of mutual respect, trust, open communication and clear understanding of roles and responsibilities between them and their coach.

The relationship that is built between an athlete and coach may differ depending on whether that athlete partakes in a team sport or an individual sport. In a study performed by Rhind, Jowett and Yang (2012) the fundamental differences in how team sport athletes and individual athletes perceive their relationship with their coaches was explored. The Coach –

Athlete Questionnaire was used as an interview tool for this study. The study used the questionnaire to investigate the athletes perception of the relationship (direct perspective) and how the athletes believed the coaches perceived the relationship (meta perspective). In order to investigate this, 699 athletes (599 team & 100 individual) were assessed using the questionnaire. The results of this study found that commitment, closeness and complementarity had a stronger correlation in team sports than in individual sports. This was attributed to team sports being more inter dependent and having a more generalised relationship with the coaches while individual athletes were perhaps able to have a detailed and specific relationship with their coaches due to increased one on one exposure. In terms of what athletes felt the coach thought of their relationship, athletes from individual sports felt the coach had more respect and trust in them than athletes from team sports did. Again this was attributed to individual athletes getting to spend increased one on one time with their coaches and develop a personal relationship. This study concluded that athletes competing in individual sports felt they had a more personal relationship with their coach compared to athletes competing in team sports. However the study also found that team sport athletes did not view their relationship with the coach as interdependent and found it more general. The study concluded that team sport coaches could benefit from establishing good relationships with each of their athletes in order to promote an environment where each athlete feels they are valued. This study highlights the room for further development of the coach – athlete relationship in team sports compared to individual sports. The variance of responsibilities for a team sport coach such as tactical planning, recruitment of new players, group dynamics and other factors mean that team sport coaches do not have the same capacity to develop interpersonal relationships with their players to the same degree.

The coach – athlete relationship is important to athlete development and overall performance, allowing coaches with a greater understanding of their athletes to achieve greater performance levels from their athletes (Prophet, Martin, Singer & Coulter, 2017). In order to provide coaches with a framework to better understand their athletes Prophet et al. (2017) used

purposive sampling to select two soccer athletes from a larger study to complete a survey using the Big Five Inventory – 44, Emmons' Strivings Assessment and Life Story/Significant Sport Stories as measures. The athletes completed the survey and within one week, they completed a semi – structured interview to expand on their life stories. Results of the study found that the athletes were motivated to engage and achieve in sports by different factors throughout their lives. One participant was motivated by male authority figures such as a parent or coach and identified recognition from these people as a motivation to achieve in sport. The other participant was driven by peers and wanting to be liked by other athletes and tried to adopt their behaviours and characteristics as he believed it was seen as correct behaviour. This study concluded that coaches need to gain a deeper understanding of their athletes in order to see what motivates and drives them to pursue sport. This study states that coaches can then tailor their coaching methods to suit the needs of each athlete and aim to create a training environment that develops positive motivation factors as opposed to negative factors. The main limitation surrounding this study is the fact that only two athletes were analysed meaning that there is very little evidence from these results to suggest that these feelings and motivations apply to the majority of the athlete population.

A combination of coaching leadership behaviours and a positive coach – athlete relationship have been found to be the most effective method of improving an athlete's developmental experience (Vella, Oades & Crowe, 2013). Vella et al (2013) investigated the relationship between coach leadership, the coach – athlete relationship, team success and the positive developmental experiences of adolescent soccer players. They took cross sectional data from 455 adolescent soccer players competing in participation sport. The athlete's perception of their coach's leadership behaviour was measured using the Differentiated Transformational Leadership Inventory for Youth Sport and the quality of the coach – athlete relationship was measured using the Coach – Athlete Relationship Questionnaire (Jowett & Ntoumanis, 2004). The results of this study found that a positive correlation existed between a combination of the coaching leadership behaviours exhibited by

the coaches and the quality of the coach – athlete relationship with a positive developmental experience for the athletes. Team success showed no relationship with positive developmental experiences. This study concluded that transformational leadership behaviours and the quality of the coach – athlete relationship have a strong association with positive developmental experiences of young athletes.

2.2 Leadership and Relationship Models

The 3+1Cs model was developed to understand the content and quality of the coach athlete relationship within sport (Jowett, 2007). This model allows for the coach athlete relationship to be examined under the factors of; Closeness, Co-orientation, Complementarity and Commitment. The application of this model in executive coaching was examined by Jowett, Kanakoglou and Passmore (2012) in which qualitative data was obtained through semi structured interviews. Ten participants were interviewed using a schedule divided into four sections designed to target each area of the model. The results of this study found that participants recognised the importance of the relationship for achieving goals and that the relationship contained important relational components such as trust and respect. The study concluded that these elements were not only important for the coach – athlete relationship but were fundamental aspects of the coaching process.

The motivational climate that a coach creates is a vital aspect of a successful coach athlete relationship. This was investigated in a study performed by Olympiou, Jowett and Duda (2008) in which the Coach Athlete Relationship Questionnaire and the Perceived Motivational Climate in Sport Questionnaire were used to determine the motivational significance of the coach athlete relationship in team sports. The study involved 591 British athletes who participated in organised team sports including football, basketball and hockey. Participation levels ranged from national and international level to regional, county, club and recreational levels. The athletes involved in the study had a relationship of at least three months with their coaches. The athletes completed the questionnaire before commencing a training session without any interference from the coaches. The results of this study found that athletes who perceived their coaches to be more task involving were

more likely to believe their coaches actions and experience greater levels of closeness, commitment and complementarity in their relationships with their coaches. This involved making the athletes feel important and allowing the athletes to be directly involved in the learning process. This highlights the importance of developing a motivation to develop within athletes rather than promote already existing talent. Praise for talent has as opposed to effort has been shown to lower an individual's task persistence, task enjoyment and task performance (Mueller & Dweck, 1998). A possible limitation of this study could be the validity of the answers provided by the athletes in the questionnaire due to the timing of completion. By completing the questionnaire directly before training the athletes may rush their answers in order to complete it quicker and commence training. Perhaps completing the questionnaire on a separate night to training would allow for more accurate answers.

Any coaching situation involves the interaction of three fundamental variables: the coach, the athlete and the environment (Cote, Yardley, Hay, Sedgwick & Baker, 1999). Cote et al (1999) completed a factor analysis of the Coaching Behaviour Scale for Sport in order to test its accuracy and validity. In order to do this, athletes were recruited from various sports such as rowing, track and field, rugby, basketball, swimming, gymnastics and ice hockey to fill out the Coaching Behaviour Scale for Sport questionnaire. The results of the questionnaire were then analysed using factor analysis in order to determine the reliability and validity of the questionnaire as a measure of coaching behaviour. Results of the study found that the Coaching Behaviour Scale for Sport had a good level of reliability and validity as it covered a large variety of coaching behaviours across a variety of sports. However it was found that a limitation of the questionnaire may be the timing in which the athletes complete the questionnaire with negative behaviours of coaches perhaps being more prevalent when the team or athletes are not performing well.

2.3 Coaching Behaviours

Research has found that in order to maximise performance there should be congruence between coaching behaviours and the behaviours preferred by players (Holgaard, Jones & Peters, 2008). In order to investigate elite soccer athlete's preferred coach leadership behaviour Holgaard et al (2008) conducted a study using eighty five soccer players from the Norwegian Premier and First Division. The Leadership Scale for Sport was used to assess the player's preferred coaching behaviour in two hypothetical scenarios. The LSS is the most commonly used scale for quantifying leadership behaviours in sports coaches since its creation (Chelladurai and Saleh, 1980). The athletes were presented with a positive successful scenario and a negative unsuccessful scenario. The athletes then filled out the Leadership Scale for Sport questionnaire to determine how the athletes preferred their coaches to behave in both scenarios. The results of the study found that the three preferred coaching behaviours for athletes were positive feedback, training and instruction behaviour and democratic behaviour. No significant differences were observed between players in the premier division and the first division however significant differences were found between players in the starting eleven and substitutes in terms of preferred behaviours with players in the starting eleven having lower mean scores than substitutes. This suggests that athletes who are unsure of their value in the team require more reinforcement and feedback than players who know they are in the starting eleven. From the results of this study it can be seen that players prefer and respond better to positive coaching behaviours in both successful and unsuccessful scenarios in sport. Athletes respond better to a coach whose behaviours are geared towards improving their performance as opposed to results (Aleksic - Veljkovic, Djurovic, Dimic, Mujanovic & Zivcic - Markovic, 2016). The study concluded that coaches could benefit from adapting their behaviour to the players preference during periods of continued success or failure in order to enhance the effectiveness of the coaching process.

Coaches are responsible for developing athletes' mental, physical, technical and tactical abilities (Becker, 2009). To investigate athlete's experience of

great coaching Becker (2009) conducted eighteen in – depth phenomenological interviews with nine female and nine male elite athletes. These athletes represented a variety of sports including baseball, basketball, American football, soccer, softball, volleyball and water polo. The athletes must have competed at NCAA Division 1, national and/or international level in order to be selected for the study. The interviews were used to gain qualitative information from athletes and followed the steps of exploring researcher bias, selection of participants, data collection, data analysis and confirming thematic structure. The results of this study revealed six major dimensions that characterised the athlete’s experience of great coaching. These dimensions were coach attributes, the environment, the system, relationships, coaching actions and influences. As this study was investigated through athlete experiences of great coaching it gave a deeper understanding of the types of behaviours and leadership styles that athletes associate with expert coaches. This study showed that great coaching is not confined to results or trophies but rather the personality of the coaches. Each athletes experience of great coaching were centered around the environment and experiences created by the coach as opposed to how successful the athletes were in terms of trophies and medals.

To examine the relationship between soccer coaches’ appraisals of stressful situations and their impact on coaching behaviours Dixon, Turner and Gillman (2017) developed an online survey based around various methods of measuring coaching behaviour such as the Leadership Scale for Sport. One hundred and five coaches from youth development teams in professional English academies completed the survey. A strong correlation was found between positive associations with the situation and positive feedback and social support while a correlation was shown between negative appraisal of the situation and autocratic behaviour. This study suggests that coaches who view a potentially stressful situation as a challenge are more likely to offer support to their athletes whereas coaches who view the situations as a threat exhibit autocratic behaviour and are less likely to offer positive feedback. Results of this study suggest that it would be advantageous for coaches to

appraise situations as a challenge in order to exhibit positive behaviours to their athletes and elicit greater performance levels.

Coaching behaviours and the role of the coach are directly related to the athlete's performance (Giannousi, Mountaki, Karamousalidis, Bebetos & Kioumourtzoglou, 2016). Giannousi et al (2016) examined coaching behaviours and the type of feedback they provide to young volleyball athletes by recording forty one volleyball coaches taking two training sessions each. The sessions were then coded and analysed to evaluate the frequency and percentage of the coaches' behaviours. The results showed that forty two percent of the coach's comments were made around the participation and effort of the players within the practice and ninety seven percent of the coach reactions were encouragement based. This suggests that the coaches analysed portrayed a lot of positive behaviours within coaching sessions with their athletes and attempted to create a positive motivational environment for the athletes. Creating a positive environment for athletes of developmental age is an essential element in helping maintain their interest in the sport and facilitates the progression of their development as athletes (Giannousi et al, 2016). The study concluded that athletes perform better when the information they receive about their skills is based on encouragement and reward. This highlights the importance of creating a positive environment for development athletes.

Coaches are central to the development of the expert performer in elite sport and to their continued participation in sport (Sherwin, Campbell & Macintyre, 2016). Sherwin et al, (2016) investigated the development of high performance coaches in team sports in Ireland by interviewing 19 high performance coaches from various sports such as rugby, Gaelic football, hurling, hockey and basketball. The interview structure followed the structure of previous studies with an exploratory content (Sarkar & Fletcher, 2014; Wagstaff, Fletcher & Hanton, 2012). In order to be included in the study the coaches had to have at least ten years coaching experience and must coach at least four hours per week. The results showed that each of the coaches had previous playing experience within the sport they coach (mean number of 25 seasons) as well as having a multi – sport background well into their

late teens (Sherwin, Campbell & Macintyre, 2016). Each of the coaches had previous experience holding leadership roles within their own sport and more than half of the participants (12/19) held leadership roles in other sports. Each of the coaches attended formal coach education courses however the study showed the coaches felt that these courses were more suited to novices of the sport and that greater development came through in – formal coach education such as learning from mentors or learning on the job. However using mentors can lead to coaches learning through imitation and adopting the coaching style of the mentor, or falling into the regular pattern of the organisation (Cushion, Ford & Williams, 2012; Werthner & Trundel, 2006; Williams & Kendall, 2007). Sherwin, Campbell and Macintyre (2016) concluded within Irish coach development there has been a downward trend towards formal coach education with only two of the nineteen coaches having undertaken an accredited coaching course in the last ten years. This downturn towards formal coach education supports the findings of McIlroy (2015) who found there was a drop off in support levels for coaches as the qualification level increased. The study concluded that high performance coaches tend to adopt the behaviours they have learned through in – formal learning methods as opposed to formal coach education courses.

2.4 Athlete Perceptions

Collins and Durand-Bush (2016) investigated the roles of coaches in optimizing team functioning in curling through athlete and coach perception. In order to investigate this topic the researchers used a constructivist grounded theory approach. This theory is a method used when a researcher seeks to construct a theory about issues of importance in people's lives (Mills, Bonner & Francis, 2006). Seventy eight high performance curling athletes and ten high performance coaches from nineteen high performance curling teams were recruited to participate in the study. In order to be selected for the study the teams had to be identified through competitive achievement and the interest of competing at national and/or international level. Athletes engaged in a semi – structured focus group interview while coaches completed an individual telephone interview in order to make sure the athletes could be honest and open with their answers. The results of the

study highlighted the athlete and coaches perceptions of the various roles the coaches played within curling, identifying the major roles as; technical/tactical specialist, mediator, manager, facilitator and motivator with technical/tactical specialist being the most prevalent. This highlights the perception athletes have of the roles their coaches are required to perform in a high performance environment and the behaviours coaches must perform in these roles in order to be successful.

Dealing with an injured athlete can be difficult for coaches and possessing the ability to make the athlete feel part of the group while injured is an important skill for a coach to possess. Athletes often need greater emotional support at the beginning of their injury than on their return to competition (Corbillon, Crossman & Jamieson, 2008). In order to investigate athlete's perceptions of social support provided by coaches and teammates during rehab, Corbillon et al (2008) took seventy two athletes from a variety of sports to fill out a questionnaire to evaluate the social support they received in the past while recovering from an injury. The results of this study found that the most effective method of support employed by the coaches was listening and task challenge support which involves the coach providing the injured athlete with a goal to achieve whilst injured. This provided athletes with a clear aim and target to achieve during their rehab and made their recovery process more effective. This study highlights the importance of how a coach behaves with each athlete and the importance of coaches learning how to deal with injured players in order to maintain the environment created by the coach.

The behaviours of a coach can differ based on the dynamics and nature of the sport. Aleksic – Veljkovic, Djurovic, Dimic, Mujanovic and Zivcic – Markovic (2016) investigated college athlete's perceptions of coaching behaviours and the differences between team and individual sports. To achieve this aim one hundred college athletes were recruited to fill out three questionnaires; a demographic questionnaire, Leadership Scale for Sport and Negative Coaching Behaviour Questionnaire. The results of the study found that individual athletes perceived their coaches to exhibit more social support, positive feedback and democratic behaviour than team sports

whereas team sport athletes perceived their coaches to hold more importance on results than individual athletes. This study supports the findings of Rhind, Jowett and Yang (2012) who found individual athletes displayed a closer relationship with their coaches. Negative feedback and insensitivity to athlete's wellbeing was also more prevalent in team sports as opposed to individual. This information could prove vital for coaches, especially team sport coaches, as it would give them an understanding of how their athletes perceive them and the types of behaviours athletes find better suits an elite and positive environment.

3. Summary and Rationale

The topics of coaching behaviour and the coach – athlete relationship have been extensively researched. The research reviewed above gives a detailed view of the dynamics of these behaviours in relation to various levels of sport and the methods used to analyse these behaviours. From the research reviewed it can be seen how important positive and democratic behaviours are to creating a good relationship with athletes (Aleksic et al, 2016; Becker, 2009; Dixon et al, 2017; Holgaard et al, 2008). The importance of the coach – athlete relationship on athlete performance can be clearly seen throughout the research reviewed (Jowett & Cockerill, 2003; Prophet et al, 2017; Rhind et al, 2012). However there is little research that investigates elite athlete's perceptions of expert coaching behaviours across various sports and whether there are consistencies or similarities in the behaviours displayed by coaches across these sports. This study aimed to address this gap in the research by determining the common key attributes that make an expert coach and how these behaviours can contribute to the development of a positive coach – athlete relationship through the use of a modified version of the Coach Behaviour Scale for Sport to establish the coach's behaviours.

4. Research Questions

The research questions proposed to help with this study are:

1. What makes a good Coach – Athlete Relationship?
2. Are athlete' perceptions of an expert coach consistent across sports?
3. Are coaching behaviours consistent across sports?

5. Methods

5.1 Design

This research adopted a cross - sectional quantitative methodological approach to collect data on elite athlete's perceptions of expert coach's behaviours and characteristics across a variety of different sports. The study aimed to examine how behaviours impact on the relationship between the coach and the athlete, whether these behaviours were consistent across a variety of sports and whether the athlete's perceptions of an expert coach were consistent across a variety of sports. This method was chosen in order to gain a broader and more detailed understanding of the types of behaviours that are performed by expert coaches and how these behaviours can influence the relationship the athlete has with their coaches. By developing this deeper understanding of expert coaching behaviour, this research can provide a framework for aspiring coaches on the types of behaviours that are most effective within elite sport and the importance of these behaviours for coaches in developing a good relationship with their athletes. Having a more refined understanding of the coach – athlete relationship and coaching behaviours will also allow coaches to improve the developmental process of their athletes (Vella et al, 2013). The quality of the coach – athlete relationship can add to the self-efficacy of an athlete and lead to increased performance levels (Hampson & Jowett, 2014).

5.2 Participants

The population chosen for this study was elite athletes from team and individual sports. An elite athlete can be defined as an athlete with extensive sport – specific knowledge and possesses an enhanced ability to identify, remember and manipulate information relevant to their sport (Swann, Moran

& Piggott, 2015). For the purpose of this study, an elite athlete was defined as an athlete who competed in senior national or international competition within their sport (eg League of Ireland soccer, European Championships, etc.). Elite athletes were chosen as the population for this study in order to examine how high performance athletes view their coaches and how expert coaches at an elite level use their behaviours to create a positive coach – athlete relationship. In order to participate in this study, athletes had to be over the age of eighteen and must have worked with their current coach for at least six months prior to completing the survey in order for the athletes to have a developed understanding of the coach's behaviours. Both male and female athletes were eligible to complete the survey to give a complete understanding of elite sport and expert coaching. Seventy four athletes completed the survey with sixty four meeting the inclusion criteria.

5.3 Procedure

A questionnaire was developed using a modified version of the Coaching Behaviour Scale for Sport (Cote, Yardley, Hay, Sedgwick & Baker, 1999) with twenty two closed questions based around physical, technical, mental preparation, goal setting and development, in competition behaviour and the coach – athlete relationship (see Appendix A). These categories are used again in a study by Teck Koh, Mallett and Wang (2009) which measured the validity of the questionnaire in relation to basketball. The use of a modified Coaching Behaviour Scale for Sport as a method of measurement was chosen because it allowed for information to be obtained in various areas relating to coaching behaviours in a clear accurate way and allowed the athletes to be completely honest in their assessment of their coach's behaviours. The specific modifications made to the questionnaire were chosen as they were deemed appropriate questions to analyse the coaching behaviours adopted by expert coaches in a broad spectrum as opposed to looking singularly at technique or competition. This allowed for an understanding of the coach's behaviours towards the athletes and how the coaches establish an effective relationship with their athletes through these behaviours. The questionnaire used a Likert scale from 1 to 7 for athletes to answer the questionnaire (Cote et al, 1999) (see Appendix A).

The questionnaire was uploaded to Survey Monkey to provide a platform for the questionnaire to be completed and the link to the questionnaire was sent to elite level coaches through personal contacts. These contacts were established through work placements, voluntary coaching work and contacts established through coaching and playing sport. This method of distribution was chosen to ensure that the athletes completing the questionnaire were competing at national and/or international level to make sure the information received was accurate and was related to the aim and research questions of the study. Survey Monkey was chosen to upload the questionnaire because it provided the participants with a convenient platform on which to complete the questionnaire and allowed for easy retrieval and collection of data for storage and analysis purposes.

5.4 Data Analysis

Once the questionnaires had been completed by the athletes the data was collected and analysed under the categories of physical, technical, mental preparation, goal setting and development, in competition behaviour and the coach – athlete relationship using statistical analysis in SPSS to establish whether any relationships existed between the coaching behaviours across the different sports analysed. The data was analysed using the 1 to 7 Likert scale within the questionnaire (Cote et al, 1999) in order to establish whether the coaching behaviours adopted and the coach athlete relationship were positive or negative through the athletes perception. The data was then grouped into the two categories of team sports and individual sports. These groups were chosen to investigate the effect of the sport on coaching behaviours and the coach – athlete relationship (Baker, Yardley & Cote, 2003). Descriptive statistics were developed based around how athlete's perceptions differed based on whether they competed in team or individual sports. The mean and standard deviation for both samples were calculated using statistical analysis in SPSS. Frequencies and percentages were also taken for both samples in SPSS. The frequencies were taken for each individual question to determine the specific behaviours that each individuals coach shows. A Mann Whitney U test was then performed in order to

determine significant differences between data sets. A Mann Whitney U test compares differences between two independent groups.

5.5 Ethical Considerations

Some ethical considerations associated with this particular study were addressed and accounted for before beginning the study. These considerations were; the confidentiality of the participants information, the participation within the study and the storage of the information provided by the participants.

The participants who completed the questionnaire were not required to include their name or any personal details. The only information required from the participants was to answer the questions within the questionnaire and to include the sport they played for analyses purposes. All the information was anonymous and could not be tracked back to any particular participant. As the questionnaire was online participation within the study was completely voluntary for all of the athletes. The athletes had the option of whether or not they wanted to fill out the questionnaire and no pressure was placed on any athlete to complete it. All information collected from the questionnaire was saved and stored on a personal encrypted computer with backup storage of the information on an encrypted memory stick in case any damage was to occur to the laptop.

6. Results

Table 1 - Demographics

	<i>Mean</i>	<i>Std. Deviation</i>	<i>%</i>
Age	22.9531	7.76935	≤25yrs = 78.3% >25yrs = 22.2%
Gender	N/A	N/A	Male = 81.3% Female = 18.8%
Years at Elite Level	5.7578	5.01980	≤6yrs = 67.5% >6yrs = 23.7%
Sport	N/A	N/A	T* = 54.7% I* = 45.3%

*Team *Individual

Within this study there were 64 participants. Table one shows that of those 64 participants 81.3% (n=52) were male and 18.8% (n=12) were female. The majority of the participants were aged 25 or younger 78.3% (n=50) while 22.2% (n=14) were over 25 years of age. Of the 64 participants 54.7% (n=35) played in team sports whereas 45.3% (n=29) participated in individual sports. A Mann Whitney U test was performed on the data to determine whether statistical differences existed between the answers of team and individual athletes. A Mann Whitney U test is used to determine differences between two independent samples.

Table 2 - Total participant responses

	<i>Mean</i>	<i>Std. Deviation</i>	<i>% 1-4*</i>	<i>% 5-7*</i>
Physical	5.9218	1.27117	12.5	87.5
Technical	5.3156	1.56080	22.8	77.2
Mental	4.7031	1.32560	40.23	59.77
Goal Setting	4.4765	1.70670	42.19	57.81
Competition	5.3593	1.37327	23.9	76.1
Coach – Athlete Relationship	3.8463	2.14362	58.3	41.7

*Denotes options 1 to 4 on scale

*Denotes options 5 to 7 on scale

Results of table two show the answers for all 64 participants within the study for each area analysed. The mean and standard deviation were calculated for each capacity using statistical analysis in SPSS. The highest percentage difference is seen in terms of the physical needs of the athletes (structure and equipment). The results show that 87.5% (n=56) of athletes felt the coach met their physical needs whereas 12.5% (n=8) of athletes felt their coach failed to meet these needs.

Table 3 - Coaching behaviours for athletes physical needs

		<i>Team and Individual Sports</i>				
	<i>Physical</i>	<i>Mean</i>	<i>Std. Dev</i>	<i>% 1-4</i>	<i>% 5-7</i>	<i>Mann Whitney U</i>
Structure	(Team)	5.7714	1.33032	11.5	88.6	.330
	(Individual)	6.0000	1.33631	17.2	82.7	
Equipment	(Team)	5.9714	1.20014	8.6	91.5	.994
	(Individual)	5.9655	1.26725	13.7	86.2	

Table three shows the results of the athlete's views related to coach behaviours around the physical needs of structure and equipment. Both team and individual athletes perceived their coaches to positively affect their physical needs as 88.6% (n=31) of team sport athletes and 82.7% (n=24) of individual sport athletes respectively felt their coaches provided them with structured training sessions. In terms of equipment; 91.5% (n=32) of team sport athletes and 86.2% (n=25) of individual sport athletes felt their coaches made sure their training and equipment was organised. The results of a Mann Whitney U test showed that there was no significant difference between the views of the team and individual athletes. (p≤.330; p≤.994).

Table 4 - Coaching behaviours for athletes technical needs

		<i>Team and Individual Sports</i>				
	<i>Technical</i>	<i>Mean</i>	<i>Std. Dev</i>	<i>% 1-4</i>	<i>% 5-7</i>	<i>Mann Whitney U</i>
Errors	(Team)	4.4571	1.59674	42.9	57.1	.000*
	(Individual)	6.3448	.89745	3.4	96.5	
Visual	(Team)	4.3714	2.03044	45.7	54.2	.024*
	(Individual)	5.4828	1.50287	24.1	75.8	
Verbal	(Team)	5.1429	1.16677	22.9	77.1	.001*
	(Individual)	6.0690	.96106	6.8	97.1	
Understanding	(Team)	5.0857	1.50238	25.8	74.3	.016*
	(Individual)	5.9655	1.11748	10.3	89.7	
Reinforcement	(Team)	4.7714	1.68184	37.1	62.9	.002*
	(Individual)	6.0345	1.17967	6.9	93.1	

**Denotes Significant Difference*

Table four shows the results related to the coaches behaviours around the technical needs of the athletes. Results of the Mann Whitney U test showed significant differences existed between the athletes of team and individual sports for each question relating to technical needs of the athletes (Errors $p \leq .000$; Visual $p \leq .024$; Verbal $p \leq .001$; Understanding $p \leq .016$; Reinforcement $p \leq .002$). In terms of feedback around errors; 96.5% (n=28) of individual sport athletes and 57.1% (n=20) of team sport athletes felt their coach provides them with specific feedback.

Table 5 - Coaching behaviours for athletes mental needs

		Team and Individual Sports				
	Mental	Mean	Std. Dev	% 1-4	% 5-7	Mann
						Whitney U
Pressure	(Team)	4.1143	1.76187	54.2	45.7	.298
	(Individual)	4.5862	1.68008	41.3	58.5	
Focused	(Team)	4.4826	1.55839	45.7	54.3	.002*
	(Individual)	5.6207	1.32055	20.6	79.2	
Toughness	(Team)	4.0000	1.66274	57.2	42.8	.374
	(Individual)	4.4138	1.63701	44.7	55.1	
Confidence	(Team)	4.8000	1.41005	37.2	62.8	.001*
	(Individual)	5.9655	1.32241	13.7	86.2	

*Denotes significant Difference

Table five shows the results for the coaches' behaviours around the mental needs of the athletes. Significant differences were found upon completion of a Mann Whitney U test in favour of individual athletes in relation to keeping the athlete focused ($p \leq .002$) and showing confidence in the athlete ($p \leq .001$). In terms of confidence; 86.2% ($n=25$) of individual athletes and 62.8% ($n=21$) of team sport athletes felt their coach showed confidence in their abilities.

Table 6 - Coaching behaviours for athletes goal setting needs

		Team and Individual Sports				
	Goal	Mean	Std. Dev	% 1-4	% 5-7	Mann
	Setting					Whitney U
Support	(Team)	4.0286	1.67131	57.2	42.8	.010*
	(Individual)	5.1034	1.47224	24.1	75.9	
Progress	(Team)	3.8000	1.71155	62.9	37.1	.002*
	(Individual)	5.2069	1.52079	24.1	75.8	

*Denotes Significant Difference

Table six shows the results for coaching behaviours related to the goal setting needs of the athletes. Both support in creating goals ($p \leq .010$) and monitoring progress towards goals ($p \leq .002$) showed a significant difference in favour of individual athletes. Monitoring progress towards goals showed

the greatest statistical difference with 75.8% (n=22) of individual athletes and 37.1% (n=13) of team sport athletes perceiving their coaches monitor their progress.

Table 7 - Coaching behaviours for athletes competition needs

		<i>Team and Individual Sports</i>				
	<i>Competition</i>	<i>Mean</i>	<i>Std. Dev</i>	<i>% 1-4</i>	<i>% 5-7</i>	<i>Mann</i>
						<i>Whitney U</i>
Focus	(Team)	4.6000	1.31059	42.9	57.2	.000*
	(Individual)	5.7586	1.18488	17.2	82.7	
Competition	(Team)	5.4000	1.35473	20.1	80	.672
	(Individual)	5.5172	1.35279	20.7	79.3	
Confidence	(Team)	5.0857	1.22165	25.8	74.2	.001*
	(Individual)	6.0000	1.43925	13.7	86.2	

**Denotes Significant Difference*

Results in table seven shows the answers related to the questions for coaching behaviours for the athletes competition needs. Significant differences were seen in favour of individual athletes in relation to maintaining athlete focus ($p \leq .000$) and showing confidence in competition ($p \leq .001$). In terms of focus; 82.7% (n=24) of individual athletes and 57.2% (n=20) of team sport athletes perceived their coaches helped them maintain focus.

Table 8 - Coaching behaviours for the coach - athlete relationship

		<i>Team and Individual Sports</i>				
	<i>Coach- Athlete (Team)</i>	<i>Mean</i>	<i>Std. Dev</i>	<i>% 1- 4</i>	<i>% 5- 7</i>	<i>Mann Whitney U</i>
Whole Self	<i>(Team)</i>	4.0000	1.66274	60	40	.002*
	<i>(Individual)</i>	5.3448	1.63174	30.9	68.9	
Approachable	<i>(Team)</i>	5.1143	1.60462	28.6	71.4	.001*
	<i>(Individual)</i>	6.3103	1.28462	6.8	93.1	
Listener	<i>(Team)</i>	4.6857	1.69378	45.6	54.4	.002*
	<i>(Individual)</i>	6.0000	1.28174	13.8	86.1	
Fear	<i>(Team)</i>	2.8857	1.40945	85.7	14.4	.0008
	<i>(Individual)</i>	1.6897	1.33907	93.1	6.8	
Favouritism	<i>(Team)</i>	3.2286	2.01590	65.7	34.4	.002*
	<i>(Individual)</i>	1.7931	1.23576	96.5	3.4	
Best Athletes	<i>(Team)</i>	2.5714	1.61401	79.9	20	.661
	<i>(Individual)</i>	2.6552	1.56470	86.1	13.1	

*Denotes Significant Difference

Table eight shows the results for the questions related to the coaching behaviours for the coach – athlete relationship. On completion of a Mann Whitney U test significant differences were seen in favour of individual athletes in relation to the athlete’s life outside sport ($p \leq .002$), approachability of the coach ($p \leq .001$), coaches listening skills ($p \leq .002$), coaches use of fear ($p \leq .000$) and showing favouritism ($p \leq .002$). In terms of coaches approachability; 93.1% ($n=27$) of individual sport athletes and 54.4% ($n=19$) of team sport athletes perceived their coach to be easily approachable.

7. Discussion

7.1 Purpose of Research

The purpose of this research study was to compare elite athlete's perceptions of expert coaching behaviours across a variety of sports.

The research questions for this study were:

1. What makes a good Coach – Athlete Relationship?
2. Are athlete' perceptions of an expert coach consistent across sports?
3. Are coaching behaviours consistent across sports?

7.2 Summary of Results

The quality of the coach – athlete relationship can add to the self – efficacy of an athlete and lead to enhanced performance levels (Hampson & Jowett, 2014). The results showed that individual athletes have a closer and more personable relationship with their coaches in comparison to team sport athletes. Individual athletes found their coaches to be more approachable and to show more concern for their life outside of sport. In terms of the coach – athlete relationship the results support Rhind, Jowett and Yang (2012) who found that individual athletes developed more personal relationships with their coaches due to increased interactions. Individual athletes perceived their coaches to give more specific feedback in comparison to team sport athletes ($p \leq .000$) and perceived their coaches to reinforce the correct technique more frequently than team sport coaches ($p \leq .002$). A significant difference exists between team and individual athletes in relation to the coaches ability to make the athlete feel confident ($p \leq .001$). Individual athletes believed their coach made them feel more confident in their abilities to perform in comparison to team sport athletes. Becker (2009) found that a vital aspect of great coaching was the coach's actions while Collins and Durand – Bush (2017) found that a vital role of a successful coach was being a motivator for their athletes.

7.3 Relevance of Findings

7.3.1 Coach – Athlete Relationship

A combination of coaching leadership behaviours and a positive coach – athlete relationship have been found to be the most effective method of improving an athlete's developmental experience (Vella, Oades & Crowe, 2013). The coach - athlete relationship plays an important role in the development of an athlete as both a person and a performer, this in turn can lead to the success of the team and individual athletes (Jowett & Cockerill, 2003). The coach – athlete relationship is influenced by numerous intrapersonal and environmental factors such as the specifics of the sport (Poczwardowski, Barott & Henschen, 2002). Rhind, Jowett and Yang (2012) found that due to increased contact time with their coaches the athletes were able to develop a more personal and respectful relationship with their coaches. The results of this study support the findings of Rhind, Jowett and Yang (2012) with individual athletes perceiving their coaches to show concern for their lives outside of sport ($p \leq .002$), being approachable ($p \leq .001$) and possess good listening skills ($p \leq .002$).

In comparison team sport athletes felt their coaches were lacking in these areas highlighting that team sport athletes don't perceive their relationships with their coaches to be close. Establishing a relationship based on trust and open communication has proved to be successful for athletes (Jowett and Cockerill, 2003). This could be due to individual athletes spending more time with their coaches and having more one to one interactions with their coaches. As team sport coaches have a squad of athletes to coach as opposed to one athlete it can be harder to establish close relationships with each athlete. However by improving the coach – athlete relationship team sport coaches can improve the performance of their athletes and their team overall. Improving the coach – athlete relationship improves the athlete's self – efficacy and improves the athlete's overall performance (Hampson & Jowett, 2014). This is an area in which team sport coaches could clearly improve and an area that could have big benefits for the athletes.

Feedback is a big part of the coach – athlete relationship and another area where team sport coaches appear to be lacking. Individual athletes perceived their coaches to give more specific feedback around correcting errors ($p \leq .000$) and to reinforce the correct technique more frequently ($p \leq .002$). This may be down to the dynamics of the sports as individual sports are usually very technical with the correct execution of these techniques being crucial to success. Holgaard et al (2008) found that athletes prefer their coaches to provide positive feedback regularly. Within team sports, although technique is important, coaches would spend most of their time working on tactical elements of their teams in order to gain an advantage. This lack of feedback may be a contributing reason as to why team sport athletes believe they are not as close to their coaches. This frequency of feedback may also be a reason why individual athletes think they have a good relationship with their coaches as they feel that they can trust the information that the coach is giving to them. This level of trust and respect between athlete and coach may be why individual athletes feel more confident in competition ($p \leq .001$) and believe their coach has more confidence in their abilities ($p \leq .001$).

7.3.2 Athlete Perceptions

The perception athletes have of their coaches are not consistent across all sports analysed however they are consistent by type of sport. Team sport athletes showed similar perceptions of how their coach behaved which indicates that even within different team sports the general coaching behaviours adopted are similar. This was similar for individual athletes also. Aleksic – Veljkovic et al (2016) found that team sport athletes felt their coaches placed an emphasis on results as opposed to performance. This concept may be a reason for the answers of team sport athletes in this study. In terms of goal setting there was a significant difference in favour of individual athletes for both support in creating goals ($p \leq .010$) and monitoring progress of goals ($p \leq .002$). An over emphasis on results could mean that the coaches are unwilling to focus on individual goals of athletes within the team but rather focus on how the group can achieve the result. Focusing on the result means the coach is focusing on an uncontrollable factor and may start

to behave in a negative way due to fear of losing. This is supported by Dixon et al (2017) who found that when coaches viewed a situation as a threat as opposed to a challenge, more negative and autocratic behaviour was used. It is then easy to see why team sport athletes don't believe their coaches have confidence in their abilities in comparison to individual athletes.

Collins and Durand – Bush (2014) found athlete's felt a vital role of the coach was to be a motivator for athletes. Becker (2009) showed that athletes perceive the coach's actions to be a vital aspect of expert coaching and that coaches were influential in an athlete's mental development. The significant difference ($p \leq .001$) in comparison to individual athletes indicates that team sport coaches are struggling to develop their athlete's mental capacities which perhaps relates to how personal the relationship developed with their coaches is. Team sport athletes don't think their coaches are easily approachable ($p \leq .001$) or show much concern for their lives outside of sport ($p \leq .002$). This may be a reason for team sport athletes thinking their coaches don't have confidence in their abilities which could result in the athlete themselves having reduced confidence levels. A positive coach – athlete relationship is the most effective method for athlete development (Vella, Oades & Crowe, 2013). The results of this study indicate that the types of coaching behaviours adopted by elite coaches are effected by whether the sport is an individual sport or a team sport. However while the behaviours differ across team and individual sports, the views of athletes within different team sports are very similar as are the views of athletes in different individual sports. This information indicates that coaches within similar disciplines use similar coaching styles and behaviours. These findings are similar to the findings of Rhind, Jowett and Yang (2012) who found the coach – athlete relationship differed according to type of sport played.

7.3.3 Coaching Behaviours

In order to maximise performance there should be congruence between coaching behaviours and the behaviours preferred by the athletes (Holgaard et al, 2008). It is unclear from this study what the preferred behaviours of the athletes are however in Holgaard et al (2008) study athletes preferred positive supportive behaviours when experiencing both positive and negative

scenarios. The results of this study suggest that individual sport athletes experience more positive coaching behaviours in comparison to team sport athletes. This suggests that individual athletes experience more of their preferred behaviours from their coaches and so would have a greater chance of maximising their performance levels in comparison to team sport athletes. Coaching behaviours are directly related to the performance levels of the athlete (Giannousi et al, 2016). This suggests that team sport athletes may not be reaching their maximum performance levels due to the conflict with the behaviours of the coach and their preferred behaviours as an athlete. This could explain why a lower percentage of team sport athletes felt their coach helped them to maintain focus as this conflict exists between the behaviours of the coach and the athlete.

Holgaard et al (2008) found that athletes preferred their coaches to provide them with positive feedback regularly. The results of this study show that coaches of individual athletes provide regular feedback in a variety of ways such as visual and verbal. Team sport athletes may think they don't receive as much feedback as individual athletes due to the dynamics of the sport and the coach's priorities. It is important for team sport coaches to develop good relationships with their athletes in order to make every athlete feel valued (Rhind, Jowett & Yang, 2012). Within a team setting the coach is responsible for making sure that the team functions well and that the team performs as a unit. This may be why team sport athletes think they don't get as much specific feedback as the coach would provide feedback around team performance and dynamics as opposed to individual technique. Individual coaches have only to work with one athlete and so it may be easier for these coaches to focus more on technique and provide specific technical feedback more frequently. As previously stated it may be because of this coach – athlete dynamic that individual athletes feel closer to their coaches ($p \leq .001$) and believe their coach has confidence in them ($p \leq .001$).

The negative aspects of the coaching behaviours such as using fear ($p \leq .000$) and showing favouritism to athletes ($p \leq .002$) correlated stronger with team sport athletes. This suggests that team sport athletes perceive their coaches to exhibit more negative coaching behaviours in comparison to

individual coaches. These behaviours could have a negative impact on the coach – athlete relationship as it may lead to the athlete fearing their coach and believing as if they have no input into the team. Olympiou, Jowett and Duda (2008) found that athletes who found their coaches to be more democratic and task involving experienced closer relationships with their coaches which correlated with improvements in performance levels. This highlights the importance of coaches making their athletes feel involved in the learning process and having an input in their development process.

7.4 Limitations

One of the major limitations of this study was sample size. A total of 74 participants completed the survey with 64 meeting the inclusion criteria for the study. A larger sample size would have allowed for a clearer distinction to be made in the various sports in relation to coaching behaviours. A bigger sample size may also have shown greater statistical differences between the participants within the study which perhaps would have made the results more applicable to coaches. A reason for this smaller sample size was the method of recruitment which involved emailing personal contacts with a link to the questionnaire. This method reduced the sample size for the study to a finite amount of participants which met the inclusion criteria. This method also meant certain contacts had to be reminded frequently to distribute the survey which meant that a number of participants left it very late to fill out the questionnaire.

7.5 Practical Application & Conclusion

The results of this study show that individual athletes establish more personal relationships with their coaches in comparison to team sport athletes. In various studies this has been attributed to individual athletes having greater contact time with their coaches and building a mutual respect and trust (Aleksic – Veljkovic et al, 2016; Rhind, Jowett & Yang, 2012). A positive coach – athlete relationship has been found to be an effective method of improving an athlete’s development (Vella, Oades & Crowe, 2013) and so within team sports coaches should be trying to improve their ability to form more personable relationships with their athletes. Improving this

relationship would lead to improvements in athlete performance and in turn overall team success (Jowett & Cockerill, 2003).

One of the key differences that emerged from the results of this study in relation to the development of the coach – athlete relationship was the concern for the athlete's life outside of sport. There was a significant difference ($p \leq .002$) between the perception of individual and team sport athletes which highlights a vital area where team sport coaches could improve. Team sport coaches need to improve their understanding of their athletes as a whole person in order to effectively develop and improve their performance levels. By developing this more personal relationship with their athletes, coaches can gain a better understanding of how to improve each aspect of their team and how to plan the development of each athlete. Improving this relationship will also have benefits for an athlete's mental health and confidence as a positive coach – athlete relationship improves an athlete's self – efficacy and performance (Hampson & Jowett, 2014). This would certainly aid team sports coaches as confidence in the athlete's abilities ($p \leq .001$) was another area which showed a significant difference between team and individual sports. By making the athlete think their coach has confidence in their abilities the coach will improve the athlete's performance levels which will improve the performance of the team.

The frequency and method of feedback given to an athlete is an important aspect of their development within a sport. Athletes prefer positive feedback and democratic behaviour from their coaches during times of success and failure (Hoigaard et al, 2008). The questions relating to the technical feedback given by coaches showed significant differences for each aspect within this study ($p \leq .000$; $p \leq .024$; $p \leq .001$; $p \leq .016$; $p \leq .002$).

From the results of this study it can be determined that team sport coaches need to provide more frequent and varied feedback to their athletes on how to improve their techniques. Increasing the frequency and variety of feedback to the athlete would allow the athlete to become a more competent performer and a greater asset to the team which would aid the performance levels of the team. Collins and Durand – Bush (2016) found that athletes felt that one

of a coach's most important roles was to be a motivator for the athletes. This highlights the importance of feedback and confidence building from coaches, as the athletes are looking to the coaches to motivate them to perform.

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Appendix A

Physical

1. Provides me with structured training sessions?
2. Ensures that training and equipment are organized?

Technical

3. Provides me with specific feedback for correcting technical errors?
4. Provides visual examples of how to improve technique?
5. Provides verbal examples of how to improve technique?
6. Makes sure I understand the techniques I am being taught?
7. Provides reinforcement about correct technique?

Mental

8. Provides me with advice on how to perform under pressure?
9. Helps me stay focused?
10. Provides advice on mental toughness?
11. Gives me confidence in my abilities?

Goal Setting

12. Provides me with support in setting my goals?
13. Monitors my progress towards my goals?

Competition

14. Helps me focus on performing well?
15. Prepares me for situations that may be faced in game or competition?
16. Shows confidence in my abilities?

Coach Athlete Relationship

17. Shows concern for my whole self (areas outside sport)
18. Is easily approachable?
19. Is a good listener?
20. Uses fear in coaching methods?

- 21. Shows favouritism to others?
- 22. Spends more time coaching the best athletes?

Figure 1: Example of questions used in questionnaire

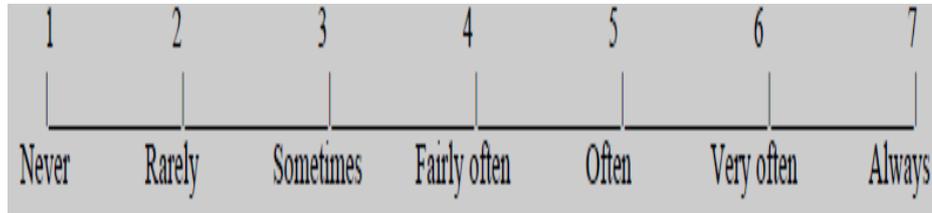


Figure 2: Example of scale used in questionnaire

**Appendix B
Clearance Form**

Approval has been granted for the methodology outlined by _____ (student) and clearance has now been given for the project to proceed.

Signed:(Advisor)

Note: All students who wish to test or measure human subjects should supply the Physiology Lab Technician (Bruce Wardrop) with a signed copy of this form and the approved methodology. Failure to comply with these requirements may result in disciplinary action as well as a failed grade.

Student's signature.....

Date.....

Figure 3: Clearance form for methodology