

University of Canterbury

PLAYERS' PERCEPTIONS OF SELF-SATISFACTION
AND TEAM COHESION IN NETBALL, A MODIFIED
NETBALL GAME (V-BALL) OR BOTH GAMES.

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ABSTRACT

Netball, a popular team sport in New Zealand, has seven on-court players per team who individually occupy positions with specific roles and boundaries. V-ball is a modified netball game in which five on-court players per team gain experience in three varying roles due to the implementation of positional rotation. This study investigates players' perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games. Self-satisfaction has been viewed in terms of individuals' basic psychological need satisfaction (BPNS). Team cohesion has been considered in light of youths' perceptions of task and social cohesion as identified in previous research.

In the current study a mixed methodology was implemented and a process of purposive sampling was used to recruit 63, 11-12 year old participants from Whangarei, New Zealand. Participants had varying degrees of experience in either sport, which determined their placement in one of three groups; netball, V-ball or both games. All participants completed a quantitative questionnaire, results of which were analysed using a one-way ANOVA. A total of 12 questionnaire participants, representative of each group, then took part in a one-on-one semi-structured qualitative interview. Interview data was transcribed verbatim and analysed through a manual coding process.

Three key findings have emerged: the extent of game structure was found to affect the fun experienced by youth participants, the presence of external regulation (from significant others) was identified to contribute to orientations of extrinsic motivation and winning orientations were found to have a negative effect on participants' perceptions of team cohesion. These findings provide new information regarding players' perceptions as a result of participation in netball and V-ball in New Zealand. These findings also contribute to those of previous research on the perceptions of youth as a result of participation in traditional and modified games.

Key words: Netball, V-ball, self-satisfaction, team cohesion, modified games.

CHAPTER ONE: INTRODUCTION

Participants' perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

Self-satisfaction in athletes has been described as a positive state which occurs through evaluation of their involvement in sport, more specifically in consideration of the processes, structures and outcomes which surround their sporting experiences (Chellandurai & Riemer, 1997). It has been suggested that perceptions of satisfaction are obtained when individuals' sporting experiences meet their essential needs (Deci & Ryan, 2004). As indicated in the Self-Determination Theory (SDT) (Ryan & Deci, 2000) there are three basic psychological needs which all individuals are motivated to satisfy (Weinberg & Gould, 2011). These needs have been identified as competence, the need for individuals to function well, autonomy, the need for individuals to experience a sense of initiative in their involvement and in the effort applied while relatedness is the natural motivation of individuals to feel socially connected to others (Weinberg & Gould, 2011). It is when each of these needs is satisfied that basic psychological need satisfaction (BPNS) occurs. One of the main principles of the SDT is fulfilment of these essential human needs and the resulting impact on individuals' participation in sport (Deci & Ryan, 2004). When these needs are met through participation in sport outcomes of increased individual and group cohesion have been suggested to occur (Carron & Dennis, 2001).

Cohesion is achieved in groups whose members possess similar reasons for participating in sport and who strive for a common goal (Jones, 2010). Cohesion has been specified into varying orientations of task and social cohesion. Task cohesion is the way in which a team works together to achieve an aim (Brawley, Carron & Widmeyer, 1987) while social cohesion is the interpersonal attraction experienced by members of a group, the extent to which group members like each other and enjoy their time together (Weinberg & Gould, 2011). Individuals who participate in teams which are considered cohesive experience enhanced motivation to, and increased satisfaction from, participation in sport (Blanchard, Amiot, Perrault, Vallerand & Provencher, 2009). Moreover,

participants who experience higher levels of team cohesion are those more inclined to continue their participation in sport (Spink, 1995). Previous research on cohesion and its impact on individuals' basic psychological needs have found that satisfaction of such may predict positive outcomes (Baard, Deci & Ryan, 2004) which can influence participants' motivation to take part in sport (Frederick-Recascino & Morris, 2004).

Additional reasons for youth participation in sport have been suggested as; to gain a sense of accomplishment (Brady, 2004), to experiment with new challenges (Allender, Cowburn & Foster, 2006; Bigelow, Moroney & Hall, 2001), to meet new friends (Kidman, 2005) and to be with current friends (Tremayne & Tremayne, 2004). It appears that if these reasons, and individuals' needs, are met through participation in sport positive perceptions of self-satisfaction and team cohesion may be created within team environments. The occurrence of such is of importance as the perceptions created during youth may influence individuals' decisions regarding continued participation in sport and may also contribute to the enjoyment experienced through future involvement (Fraser-Thomas, Côte & Deakin 2005; Tremayne & Tremayne, 2004). In order to encourage individuals' BPNS through participation in sport it appears as if autonomy supportive environments may be of benefit. The benefits of these environments may also extend to the cultivation of Self-Determined forms of motivation in youth sport participants (Mageau & Vallerand, 2003). While the existence of autonomy supportive environments could be considered of importance across all codes and levels of participation, this study specifically investigates players' perceptions of self-satisfaction and team cohesion with regard to youths' participation in netball, the modified netball game (V-ball) or both games.

Netball is an international sport played in more than 80 countries by over 20 million participants (International Federation of Netball Associations, 2012) and is currently the most popular female sport in New Zealand (SportNZ, 2012a). In 2011, there were 13, 611 teams playing Netball in New Zealand. Based on calculations of 10 players per team this resulted in approximately 136, 110 players (Netball New Zealand [NNZ], 2011).

Netball is a fast paced game with the aim of scoring more goals, from within the goal circle, than the opposing team (IFNA, 2012). Netball is a team sport of seven on-court players who individually occupy one of seven positions. Each position has definite boundaries, roles and responsibilities (NNZ, 2007b) which indicates the need for position-specific skills, technical and tactical understanding.

V-ball on the other hand is a modified version of the traditional netball game in which teams also aim to score more goals than their opposition however increased opportunities to do so are provided. In V-ball goals may be attempted both inside and outside the goal circle by an increased number of on-court positions. Due to the implementation of positional rotation in V-ball players are provided with increased opportunities to develop a wider range of skills and game understanding. The introduction of V-ball has added to the modified games movement for youth participation in sport. Of specific interest in the current study are the game modifications of positional rotation and decreased team size.

Modified team sizes have been explained to significantly influence the cohesiveness experienced within sports teams (Carron, Shapcott & Burke, 2007). When team sizes are increased it has been indicated that participants experience decreased enjoyment and team cohesion (Widmeyer, Brawley & Carron, 1990). In teams with decreased sizes enhanced cohesion may therefore be experienced due to increased opportunities for interaction to occur between a wider range of team members, increased engagement and perceived team support (Hill & Green, 2008).

As indicated previously, positional rotation was included in the game design of V-ball. This game modification has been suggested as a likely approach for participants to obtain a broader understanding of game concepts and to develop a more expansive set of skills (Côte, Lidor & Hackfort, 2009). Positional rotation has also been found to enhance perceptions of sharing and ethical behaviours among team members (Mellalieu & Juniper, 2006). These factors may endorse the cohesion experienced within a team while enhancing the potential for individuals to experience BPNS (Ryan & Deci, 2000). These suggestions have been supported in previous research where

small-sided games, which implemented positional rotation, were suggested to allow greater appreciation of fellow team members while enabling the development of a broader range of role understanding (Mellalieu & Juniper, 2006).

The implementation of game modifications such as decreased team size and positional rotation may therefore satisfy a wider range of participants' needs through positively affecting their perceptions of team cohesion (and relatedness) within team environments as well as their perceptions of competence in a wider range of playing contexts. In literature importance has been placed on youths' needs being met through involvement in sport where opportunities are provided for individuals to gain experience in various contexts of participation (Côte et al., 2009; Hill & Green, 2008). As positional rotation has been endorsed by some (Bigelow et al., 2001; SPARC, 2006) where learning a broad range of skills has been described as an essential factor and an aim of youth participation in sport (Smoll & Smith, 2002) this game modification may be a promising approach in the creation of experiences which meet a number of the aims of youths' participation in sport.

As various environmental, individual or activity constraints are able to be addressed through a modified game approach (Williams & Hodges, 2005) those which were originally designed for adult participation may be increasingly achievable and comprehensible for children (Werner, Thorpe & Bunker, 1996). Implementation of these games may therefore encourage and enable an increased number of youth participants to experience inclusion, success and enhanced skill execution and performance (Gabbett, Jenkins & Abernathy, 2009). If the suggested outcomes of the implementation of modified games are to occur it appears that increased self-satisfaction and team cohesion, as well as overall enjoyment, may be experienced by participants.

Alongside the potential for perceptions of self-satisfaction and team cohesion to be created, participants of sport may be able to experience the various functions and possible benefits which sport provides. An example of a function of sport is participants' ability to be socialised into various societies and cultures or to be involved in environments where healthy lifestyles and health-related behaviours can be encouraged (Hill & Green, 2008) and maintained (Mulvihill,

Rivers & Aggleton, 2000). Participation in sport may also provide benefits such as the ability for individuals to build character and improve their physical fitness and skill (Smoll, 2001), for contributions to be made toward healthier lifestyles (Hill & Green, 2008; Sabo & Veliz, 2008), for experiences to be had within enjoyable recreational environments during youth and for social competence to be encouraged (Allender et al., 2006; Smoll, 2001). In light of these functions and benefits, it appears that participation in sport may be in the best interests of individuals, communities and societies in both the short and the long term (Tremayne & Tremayne, 2004).

Despite the aforementioned positive aspects of involvement in sport low youth participation rates have been a concern of researchers (Nader, Bradley, Houts, McRitchie & O'Brien, 2008; Sabo & Veliz, 2008). The late childhood to mid teen years have been highlighted as a specific area of withdrawal (Nader et al., 2008) which is of importance as these years have been considered essential to the fundamental skill learning and development of individuals (Pope, 2006). To further highlight the importance of experiences had during this stage it has been suggested that they may have a considerable effect on individuals' views on continued participation in sport (Fraser-Thomas et al., 2005; Tremayne & Tremayne, 2004).

In order to provide a context for which the reader can proceed through this thesis with greater understanding the following section provides background information of both netball and V-ball. The history of netball and V-ball are outlined and the respective rates of participation identified. Specific game characteristics are also suggested in order to provide a greater contextual understanding of both games.

A background to netball and V-ball

History and participation of netball.

The origins of the traditional netball game can be traced back to 1891 when James Naismith, a Canadian immigrant to the USA, was requested to create an indoor activity for male members of what is now referred to as the YMCA, in Springfield, Massachusetts (Murray, 2008). It was from

these beginnings that the game of basketball was created. Behind the creation of basketball were aims for participant injuries to be decreased from those of current activities (Murray, 2008). These aims were influential to the game's design and explain many of the resulting rules and game characteristics.

Basketball was originally designed for male participation however within just two days of its implementation had gained the interest of female observers (International Federation of Netball Associations [IFNA], 2011). Clara Baer, a female teacher, requested a copy of Naismith's basketball rules in order to learn, and implement, the game with others (IFNA, 2011; Smith, 2003). Upon investigation of these rules however a pivotal misinterpretation occurred. Baer believed that players were allocated specific areas of the court, outside of which they were not permitted to move. This misinterpretation, combined with the restrictions of women's attire at the time, meant that additional rule modifications were required in order to enable female participation. Examples of these modifications were the removal of bouncing the ball (dribbling) and for no steps to be taken while individuals had possession of the ball (International Netball, 2011).

It was from these foundations that the game now recognised as netball¹ was conceptualised. The first official netball game was played in 1895 at Madame Ostenburg's College in England (IFNA, 2011). The game then spread throughout the British colonies of Jamaica, Antigua and Australia (International Netball, 2011). By 1905 the English version of netball had been presented in; USA, South Africa, Canada and France as well as throughout Ireland, Wales and Scotland (Murray, 2008) and by 1920 had been implemented into many of their schooling systems (Smith, 2003).

The first international netball tests were held in 1956 (Murray, 2008) between England, Scotland and Wales (Smith, 2003). During this same year an England team toured South Africa and the Australian Women's Basketball Association Team toured Britain (Murray, 2008). This international exposure occurred prior to formal netball rules being established in 1960 (Murray, 2008) which coincided with the formation of IFNA: International Federation of Netball

¹ Until 1970 netball was referred to as Women's Basketball (Murray, 2008; Romanos & Woods, 1992).

Associations (IFNA, 2011). The first Netball World Championships were held in Eastbourne, England in 1963 (IFNA, 2011; International Netball, 2011; Murray, 2008; Smith, 2003) and have been held four yearly ever since. Netball has also been included in the Commonwealth Games² programme since its introduction at the Kuala Lumpur Commonwealth Games in 1998 (IFNA, 2011).

The first game of Netball was played in Auckland in 1907 following its introduction to the country in 1906. It has been suggested that the game was launched in New Zealand by Rev. J. C. Jameson who, after observing the game in Australia, returned to New Zealand and taught the game to the students of his bible class. It was bible classes who initially played competitive netball in New Zealand prior to introduction of the game in schools (Murray, 2008). Although many changes have been made to the game since its introduction, netball has continued to grow in popularity and is currently the number one team sport for females in New Zealand (SportNZ, 2012a).

In New Zealand netball participation is typically initiated in the fundamental, yet specifically structured, modified games of ðFun Fernsö (five to seven years of age) and ðFuture Fernsö (eight to ten years of age) (NNZ, 2008b, p. 3; SportNZ, 2012a). In Fun Fern and Future Fern programmes rotation occurs throughout all positions in order for participants to use a range of basic skills and gain an understanding of the underlying concepts required in each role. This positional rotation is implemented through the use of numbers (Fun Ferns) and progresses to use of the seven unmodified netball positions (Future Ferns).

Participation in the aforementioned netball programmes can occur either through club membership or through netball teams within schools. In a less structured sense, however, it is likely that children will be introduced to the game through participation in netball within primary and intermediate schools. The implementation of netball programmes in schools provides children with opportunities to experience the game, even those who may not participate in the more formal netball structures. In the instance of schools not having personnel with sufficient netball

² The Commonwealth Games are held every four years in one of the competing teams' nations. Participating nations are all members of the Commonwealth (Murray, 2008).

knowledge, or the time to implement appropriate netball programmes, the assistance of parents or external coaches may be sought (Miles, 2012).

Regardless of the location or the formality of initial participation in netball it is recommended that during youth emphasis should be placed on;

- Having fun,
- Learning and developing basic skills and game concepts,
- Using equipment and rules which are modified to suit the developmental needs of participants, and
- The incorporation of a player-centred approach (NNZ, 2008d).

Following involvement in Future Fern netball is the stage of participation which occurs during New Zealand schooling years 7 and 8 where participants are typically between 10 and 13 years of age. The aims and objectives of netball participation during this stage are for development of sport-specific skills and increases in both rule understanding and decision making abilities (NNZ, 2008d). It is also a stage for participants to transition from developmental games to more competitive versions of the traditional netball game. At this stage official size five balls (68-71cm in circumference, 397-454g in weight) and official net heights (3.05m) and ring diameters (381mm) are used (Murray, 2008). An important characteristic of netball participation at this stage is that positional rotation ceases to be implemented.

Prior to, and during, years 7 and 8 both males and females are able to participate together. Perhaps in anticipation of increases in size and strength as participants age, the arrangement of alternate competitions for males after the age of 12 years are encouraged (NNZ, 2008b; NNZ, 2008d). As mentioned, following participation in years 7 and 8, players may progress into the increasingly competitive area of secondary school and age group netball. Here play becomes more skill and position specific where the emphasis shifts from skill development to both interschool and club competition. During the secondary school stage increased opportunities exist for participation in additional tournaments and talent identification programmes at regional and national levels.

In order for much of the content of this thesis to be understood with greater comprehension, and for comparison of the games of netball and V-ball to be made, the following section provides introductory information on the characteristics of netball and V-ball respectively.

Game characteristics of netball.

Netball is an invasive sport in which two teams (of seven players each) pass and catch the ball between team members in order to move the ball towards their designated goal circle. Only once the ball is inside the goal circle may shots be attempted by players occupying one of two shooting positions; goal attack (GA) or goal shoot (GS). Netball is a non-contact sport in which players are allocated a maximum of three seconds in possession of the ball during which they must not step. Additionally players must not bounce or throw the ball to themselves or over the distance of one third (without it making contact with another player).

Each of the seven on-court players is allocated a specific position in netball which dictates their roles, responsibilities and boundaries of play. The boundaries are indicated by the court markings which can be seen in Figure 1. Positional substitutions may occur in netball however only in specific circumstances such as; quarter and half time intervals, in situations relating to an injured player and in situations where stoppages have been made at the umpire's discretion (NNZ, 2008c).

One of the prevalent characteristics of netball is the stop, start nature of game flow which provides a staccato³ type of rhythm (Murray, 2008). It is this rhythm which results in netball being considered a game of great physical control and adds to the need for tactical and decision-making skills. Netball games commence by a centre pass taken from within the centre circle by the player occupying the centre position. The centre pass occurs following each goal however, as netball is a game which provides equal possession opportunities, passes are taken alternatively by either team's centre for the entirety of the game. Unmodified netball games are typically played in four quarters and are controlled by two umpires; each occupying one side line and one base line of the court

³ A staccato rhythm is one which is usually discussed with relation to music however has been described as being sharply detached and separated from the next (Oxford University Press, 1993).

(Murray, 2008). As previously identified, V-ball is a modified netball game, the history and participation of which will be discussed in the following section.

History and participation of the modified netball game; V-ball

V-ball⁴, a modified netball game, was developed and introduced to the Netball North region of New Zealand in 2010 by Lyn Gunson. V-ball was designed to provide a game with opportunities for free running and increased ball handling to be experienced alongside elevated rates of participation. V-ball was also introduced to encourage the participation of both youth and adults in a recreational activity (Gunson, 2012) and;

- To provide greater participant access to a sport,
- To increase youth participation in physical activity,
- For skill improvements to teamwork, ball handling, footwork, spatial awareness and hand/eye co-ordination to occur,
- For principles of fair play, teamwork and sharing to be reinforced,
- To encourage the improvement of core movement skills in youth,
- To provide an appealing and safe game for participation by boys, girls, men and women,
- For the officials impact in the activity to be decreased, and
- For opportunities of skill development and improvement to be presented through a game which provides:
 - Increased opportunities for participant touches of the ball,
 - Participation in an increasingly free flowing activity,
 - Flexible thinking and involvement being encouraged in participants,
 - Improved participant abilities in large ball handling,
 - Incorporation of elements of both fitness and agility within a game, and
 - Opportunities for co-operation and communication to be experienced (Gunson, 2012).

⁴ The game has been named V-ball due to the V representing the five on-court players.

While there are elements of the traditional netball game within its design, V-ball is a new game with its own objectives. Due to the familiarity of Netball as a female dominated game in New Zealand it has been suggested that use of the name (V-ball) bears particular importance in increasing the acceptability of male participation (Gunson, 2012).

The implementation of V-ball has been supported and promoted in Whangarei⁵ where V-ball programmes have undergone development and where regular competitions have been held. In Whangarei, schools are presented with the option of having V-ball workshops facilitated for their students by visiting members of Netball North/Whangarei Netball Centres (WNC) Community Youth Leadership Programme. Schools expressing an interest in this opportunity are provided support in establishing interschool V-ball competitions within clusters of primary schools who are similarly involved. The culmination of learning as a result of the V-ball programme occurs through an annual V-ball challenge held by WNC (Cresswell, 2011).

While participation in club and school netball may come at a financial cost to participants and their families, WNC do not charge individuals or schools a fee for the implementation of V-ball workshops (Cresswell, 2011). V-ball has thus far been a viable programme through which participants have had greater access to a sport; one of the aims of the games creation (Gunson, 2012). V-ball has also provided opportunities for those who do not, or cannot, participate in conventional netball competitions to experience game involvement.

Game characteristics of the modified netball game; V-ball.

Game modifications such as decreased team size (from seven to five players per team), unlimited rolling substitutions⁶ and rotation throughout the three on-court positions; defence, attack and centre, have been made in the creation of V-ball. These modifications have been implemented to provide youth with opportunities to develop a wider range of skills and contexts of game understanding. While, in V-ball, the goal height remains the same as that used in traditional Netball

⁵ Whangarei is an area in the northern aspect of the North Island, New Zealand.

⁶ Rolling substitutions occur when a player either comes off the court, their position subsequently being filled by an off-court team member, or when on court players exchange their on-court positions.

(for 11-12 year old participants) modifications have been made to the way in which V-ball shots can be made. In V-ball, shooting players are able to attempt to shoot goals from inside the goal circle (for one point) while shooting and centre players are able to attempt shots from outside the goal circle (for two points). V-ball is played on a standard netball court with unchanged dimensions (see Figure 2) however can also be played on grass or sand. V-ball games are played in four quarters or two halves dependent on the competition within which participation occurs.

V-ball is a game which requires high levels of co-operation between team members and maximum individual participation which encourages a combination of fitness and skill elements with the more social aspects of sport. It was hoped that as a result of participation in V-ball, individuals would have maximised opportunities for game participation, for the use of fundamental movement skills as well as cooperative social behaviour while appreciating involvement in a free flowing activity. It was also hoped that through participation in V-ball, individuals would experience increased game involvement and opportunities for decision making (Gunson, 2012). The occurrence of such would be consistent with a number of the needs of youth sport participants (SPARC, 2006). In order for the aims of V-ball to be achieved the rules of V-ball have been kept simple and competitions including both single-sexed and co-ed teams have been encouraged. Positional rotation has also been introduced to provide a more inclusive environment for participants while keeping game intensity high. The reasoning behind modifications being made to the traditional on-court positions of netball was to allow individuals to participate with less boundary restrictions, in varying game situations, while experiencing each of the roles and their differing responsibilities on court (Gunson, 2012).

Researcher interest in this study

It was a genuine interest in youth participation in sport which led me to choose the research topic of this study. From a very young age I have enjoyed being a participant in a wide range of sports where some of my fondest memories and best friendships have been created. I am interested in providing others with opportunities to do the same and in taking a holistic perspective, I believe that having these opportunities will enrich individuals' lives, both at the time of participation and in the future.

Prior to embarking on my post-graduate research I had played and coached netball both in New Zealand and overseas. The experiences had during these years led to my development of a real enthusiasm for encouraging, supporting and advocating youths' participation in sport. This enthusiasm has been amplified through my observations of youth in sport and, more specifically, the excitement and enjoyment clearly displayed by many. Unfortunately I have also observed converse outcomes of participation in sport for some despite their initial participation occurring with eagerness and fervour. While these outcomes have occurred for various reasons the end result has been discontinued involvement and negative perceptions of sport.

Specific interest in participants' perceptions of modified games has stemmed from their use in my own coaching. It was of personal interest to investigate if a modified game such as V-ball, which implements many of the aspects identified as reasons for youths' participation in sport, was able to increase individuals' positive perceptions of sport. It was also of interest to identify the effects of the implementation of modified games on participant retention, specifically in youth sport.

It is my hope that the findings of this research contribute to an increased understanding of youths' reasons for participation in sport and to investigate if the use of modified games is a suitable approach for this to occur. Ultimately, I would be delighted if the findings of the current study were able to play a role in positively enhancing individuals' experiences in sport and in doing so, encourage their on-going participation.

Reasons for this research

With specific interest in this project by NNZ, and more specifically Lyn Gunson (the creator of V-ball) and Netball North Harbour (NNH), the current study will compare player perceptions of self-satisfaction and team cohesion experienced by participants of the traditional game of netball, a modified netball game (V-ball) or in both games. Furthermore, this study will expand on previous research surrounding the role of modified games, with a more specifically the effects of positional rotation and decreased team size.

It is hoped that the results of this study may contribute to a wider understanding of, and add to, the positive and worthwhile experiences of youth in sport. In future these outcomes may result in an expanded pool of motivated and talented netball participants in New Zealand and increased rates of participant retention. It is also hoped that the outcomes of this study will increase understanding of the enjoyment which youth perceive through participation in traditional and modified games as well as their reasons for initial and continued participation. Due to the fact that V-ball is in its relevant infancy no previous attempts have been made to research participant perceptions of game involvement in the sport or to investigate the outcomes of V-ball's implementation. Furthermore, there have been no previous studies conducted on participants' perceptions of self-satisfaction and team cohesion in youth sport through a comparison of traditional sports and modified games.

Aim of project

The aim of this study was to compare perceptions of self-satisfaction and team cohesion experienced by individuals (11-12 years of age) when playing netball, a modified netball game (V-ball) or both games.

Research questions (RQ)

1. What are players' perceptions of self-satisfaction in netball?
2. What are players' perceptions of self-satisfaction in V-ball?
3. What are players' perceptions of team cohesion in netball?
4. What are players' perceptions of team cohesion in V-ball?

Delimitations of research.

V-ball is a sport which has been implemented in the region of Whangarei, New Zealand, the site of data collection in the current study. While a more widespread investigation may have enabled a larger number of participants to be involved it was well outside the time and financial restraints of this study to do so. Data could also have been collected from a larger amount of participants if the criteria had allowed less than two years' experience in either sport. This period of experience was however considered a suitable time frame for the development of more sound perceptions upon which research findings could be based. Additionally, this study focused on participants who were 11-12 years of age. Data could have been gained outside of these age ranges however this was specifically selected in order to maintain a clear focus on participant perceptions during youth.

Limitations of research.

Due to the fact that the data were gained from only one region (Whangarei, New Zealand) a limitation of this study may be the difficulty of findings to be used as a broader representation of the views held by others. Similarly, due to the fact that research participants were of a very specific age (11-12 years), it may be difficult for these findings to be used across wider age groups. An

additional, and important, limitation in the current study may be the small sample sizes. This limitation may additionally affect the usefulness of findings as previously mentioned.

Definitions of terms.

In order to avoid the occurrence of misinterpretation when reading this thesis it is important that key words/areas are defined.

ATG (Individual attractions to the group). Is the interaction of the individual members' feelings about the group, their personal role involvement with other group members (Carron et al., 1985, p. 248). Additionally, ATG is an aspect of the Conceptual Model of Cohesiveness (Carron, 1982).

Athlete satisfaction questionnaire (ASQ). A questionnaire designed by Chellandurai and Riemer (1997) in order to identify athlete perceptions of satisfaction in sport.

Autonomy. Experienced when individuals are in control of their own actions and when actions are considered to have been self-initiated (Baard et al., 2004; Blanchard et al., 2009; Deci & Ryan, 2004; Frederick-Recascino & Morris, 2004; Ryan & Deci, 2000; Weinberg & Gould, 2011).

Basic Psychological Need Satisfaction (BPNS). Is central to the SDT and has been suggested that individuals' basic psychological needs: competence, autonomy and relatedness, must be met for optimal functioning to occur (Ryan & Deci, 2000).

Cohesion. Reflects a team's ability to be united and to stick together, often in the pursuit of a specific aim (Carron, Widmeyer & Brawley, in Duda, 1998, p. 213). Cohesion is multidimensional incorporating task and social orientations (Carron & Dennis, 2001).

Competence. Perceived when individuals feel confident and effective in their own actions (Baard et al., 2004; Blanchard et al., 2009; Deci & Ryan, 2004; Frederick-Recascino & Morris, 2004; Ryan & Deci, 2000; Weinberg & Gould, 2011).

Fun Ferns. A modified netball game played by five to seven year olds in New Zealand (NNZ, 2008b).

Future Ferns. A modified netball game played by eight to ten year olds in New Zealand (NNZ, 2008b).

GI (Group Integration). An aspect of the Conceptual Model of Cohesiveness (Carron, 1982) which has been described as 'the closeness, similarity and bonding within the group as a whole- the degree of unification of the group' (Carron et al., 1985, p. 248).

International Federation of Netball Associations (IFNA). IFNA is the exclusive international governing body for netball. IFNA is affiliated to the International World Games Association, the Association of Recognised Sports Federations and the General Association of International Sports Federations (IFNA, 2012).

Modified games. Games which bear a resemblance to a traditional sport although include modifications in order to suit participants' understanding (Pill, 2006) and better meet their developmental needs (Hubball, Lambert & Hayes, 2007). Examples of modifications may be to equipment size, team size, playing areas and substitution rules (Australian Sports Commission, 2012).

Netball. A fast paced team sport with the aim of scoring more goals than the opposition by successful shots taken from within the goal circle (IFNA, 2012).

Positional rotation. A game modification which allows players to experience all positions and substitute with other team members on the side line throughout the game (Gunson, 2012).

Relatedness. The need for individuals to feel a sense of belongingness with, connectedness to, and acceptance by, others (Baard et al., 2004; Blanchard et al., 2009; Deci & Ryan, 2004; Frederick-Recascino & Morris, 2004; Ryan & Deci, 2000; Weinberg & Gould, 2011).

Satisfaction. A positive affective state resulting from a complex evaluation of the structures, processes, and outcomes associated with the athletic experience (Chellandurai & Riemer, 1997, p. 135).

Self-Determination Theory (SDT). An approach to personality and human motivation which focuses on socio-contextual conditions, assisting the natural processes of healthy psychological development (Ryan & Deci, 2000) and intrinsic and extrinsic motivation (Frederick-Recascino & Morris, 2004).

Social cohesion (AV Social). The interpersonal attraction experienced by members of a group and the extent to which team members like each other and enjoy being in each other's company (Weinberg & Gould, 2011).

SPARC (Sport and Recreation New Zealand). A former government organisation in New Zealand, responsible for sport and recreation (SportNZ, 2012b).

Task cohesion (AV Task). The extent to which a team works together in the aim of achieving a task which is also considered the basis of teamwork (Brawley et al., 1987).

Teaching Games for Understanding (TGfU). A teaching model which uses games that have been modified from traditional versions of a sport (see Modified games).

V-ball. A modified netball game which implements positional rotation, decreased team sizes and varied positional roles.

Youth Sport Environment Questionnaire (YSEQ). A questionnaire designed by Eys, Loughead, Bray and Carron (2009a) in order to measure cohesion in youth sport participants.

Netball playing positions (NNZ, 2007b).

GS (Goal shoot) works in goal third, including the goal circle. Defended by GK.

GA (Goal attack) works in centre and goal thirds, including the goal circle. Defended by GD.

WA (Wing attack) works in centre and goal thirds (outside of the goal circle). Defended by *WD*.

C (Centre) works in all thirds, excluding either goal circle. The centre is a link player between the defensive third and the attacking third and is defended by the opposing *C*.

WD (Wing defence) works in centre and defence goal thirds. The direct opponent of *WA*.

GD (Goal defence) works in centre and defensive goal thirds. The direct opponent of *GA*.

GK (Goal keep) works in the defensive goal third only. The direct opponent of *GS*.

V-ball playing positions (Cresswell, 2012).

S (Shooters) works within the attacking half of the court.

C (Centre) works throughout the court (outside if goal circles).

D (Defence) works within the defensive half of the court, defends the opposition from scoring.

Definitions of netball and V-ball court layouts and components

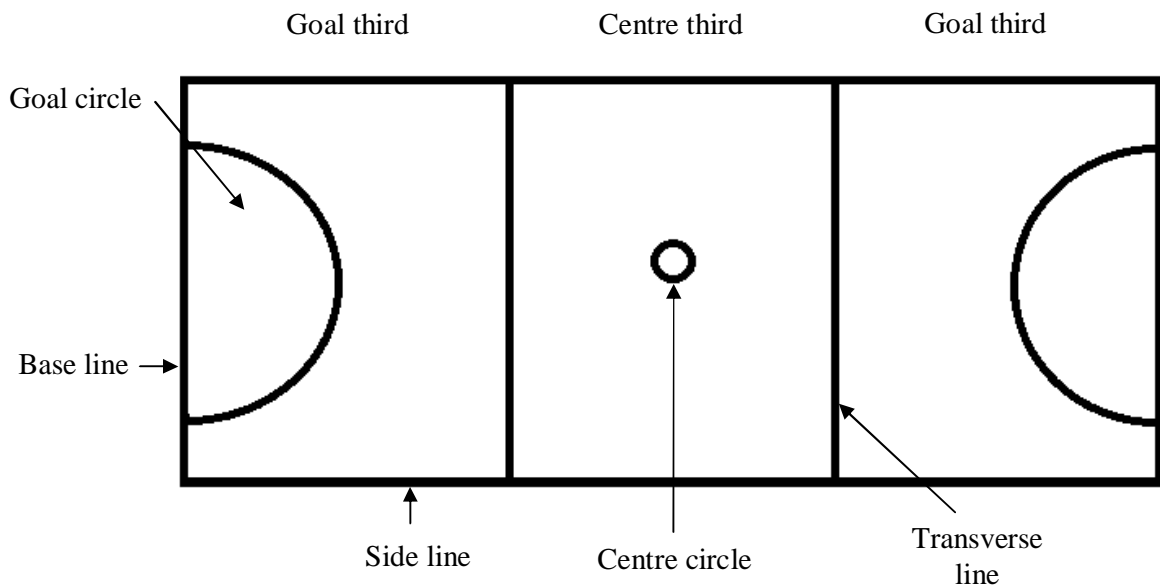


Figure 1: The layout and components of a netball court (source: IFNA, 2011).

The netball court is 30.5m in length and 15.25m in width. As seen in Figure 1 the Netball court is separated into thirds with a semi-circle (the goal circle) of 4.9m radius occupying either end (International Netball, 2011).

Comparatively, V-ball is played on a standard netball court with unchanged dimensions however boundary modifications have been made. As can be seen in Figure 2 the V-ball court includes a centre line, as opposed to two transverse lines, therefore the court layout is changed from thirds to two halves.

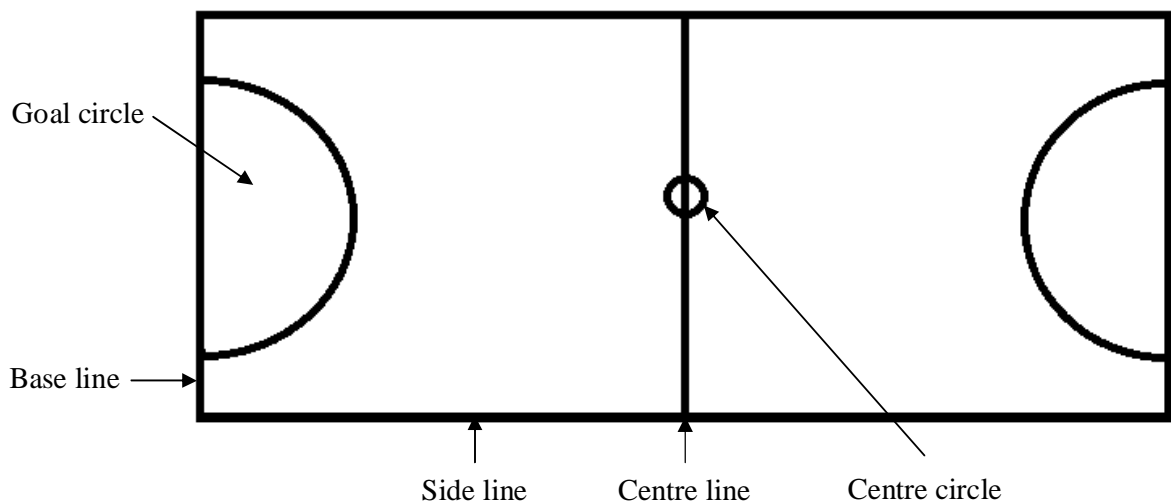


Figure 2: The layout and components of a V-ball court (source: Cresswell, 2011).

CHAPTER TWO: LITERATURE REVIEW

This review of literature provides an overview of several key topics related to this study. Initially, literature surrounding netball participation and specific participation rates both internationally and within New Zealand are reviewed as well that of V-ball participation in Whangarei, New Zealand. Identification of the factors affecting youth participation in sport is then presented as well as relevant characteristics specific to youth populations. Literature and previous research on the reasons for youths' participation in, and withdrawal from, sport is then discussed. Literature on the SDT is then reviewed and discussed with specific reference to youths' motivations for participation in sport. Aspects of both self-satisfaction and team cohesion are investigated individually, followed by an insight into literature which investigates the effects of game modifications such as varied group sizes and the implementation of positional rotation. Literature surrounding the effects of the implementation of modified games in youth sport is then reviewed followed by the concluding section of this chapter which discusses previous research conducted in the specific areas of self-satisfaction and team cohesion.

Netball participation.

At the beginning of the 21st century there were more than 20 million people playing netball internationally from five regions around the world (Murray, 2008); Oceania, Europe, Africa, Asia and the Americas. Within these regions are over 80 countries and more than 74 National Netball Associations. When combined these regions form the International Federation of Netball Associations, commonly known as IFNA (IFNA, 2011). NNZ is a member of the Oceania region and in 2012 their national team⁷ was ranked second in the world. The top four ranked countries in international netball in 2012 were Australia, New Zealand, England and Jamaica, respectively (IFNA, 2012).

⁷ The New Zealand Netball team is also known as the Silver Ferns

As can be seen in Table 1 there were a total of 13, 611 teams playing netball in New Zealand in 2011. These participant numbers have indicated that netball participation rates in New Zealand have grown by over 1,000 teams in the last five years (NNZ, 2006; NNZ, 2007a; NNZ, 2008a; NNZ, 2009; NNZ 2010; NNZ 2011) as shown in Table 1.

Table 1: Total participation rates of netball in New Zealand from 2006 to 2011 (source: NNZ, 2006; NNZ, 2007a; NNZ, 2008a; NNZ, 2009; NNZ 2010; NNZ, 2011).

Year	Participation rate (team)
2011	13, 611
2010	13, 148
2009	13, 463
2008	13, 851
2007	13, 149
2006	12, 550

To put these participation rates into perspective and to perhaps more clearly display the popularity of netball in New Zealand the use of an international comparison may be of benefit. In England, in 2011, there were a total of 77,931 players from an estimated population of over 51 million (England Netball, 2012). By contrast, in the same year there were a total of 136,110 players from New Zealand's estimated population of 4 million (NNZ, 2011). This data can be seen in Table 2 where the membership rates of netball participation in New Zealand in 2011 are presented by region, membership community and team numbers. From these numbers alone, the popularity of netball participation in New Zealand is evident. It is of interest to note that it is not only player participation rates, which have shown recent increases in netball throughout New Zealand. While each netball team has been estimated to have 10 players (on average), they are also estimated to

have one coach. In 2011, there were a reported total of 9,509 coaches (NNZ, 2011); a participation rate that has shown a significant increase of nearly 15% when compared to just one year previous where there was an estimated 8,294 coaches nationwide (NNZ, 2010).

Table 2: 2011 Membership rates of netball in New Zealand as represented by region and community of membership (source: NNZ Annual Report, 2011).

	Senior	Secondary	Year 7&8	Future fern	Fun fern	Social	Total
Southland	93	121	109	131	20	73	547
Otago	118	183	128	190	36	190	845
Canterbury	349	390	313	307	38	214	1611
Tasman	88	134	103	83	6	0	414
Wellington	252	370	356	343	23	222	1566
Eastern	189	184	101	80	13	86	653
Western	236	281	229	297	11	143	1197
Bay of Plenty	138	145	159	296	41	120	899
Waikato	311	304	313	357	80	43	1408
Counties Manukau	209	271	231	216	50	274	1251
Auckland Waitakere	185	448	253	334	159	417	1796
North	267	356	304	384	100	13	1424
Total teams	2,435	3,187	2,599	3,018	577	1,795	13,611

Netball and V-ball participation rates in Whangarei.

As can be seen in Table 2, Netball North, the region within which this study was conducted, was home to a total of 1,424 teams in 2011 (NNZ, 2011). As participants were 11-12 years of age and within the year 7 and 8 group, it is important to note that in 2011 Netball North was the region with the highest number of junior netball participants and had among the largest number of year 7 and 8 participants nationwide (NNZ, 2011). Moreover, in the 2011 Whangarei Netball Centre (WNC) winter competition the year 7 and 8 group was represented by 38 teams (estimated at 380 players). An intermediate winter sports tournament was also held in Whangarei in 2011, organised by the Whangarei Primary Principals Sports Association, for participants of the same age group (year 7 and 8). This tournament was participated in by 46 year 7 and 8 netball teams estimated at a total of 460 netball players (Cresswell, 2011).

Additionally, WNC held their annual V-ball challenge in 2011 where eight teams participated in the 11-12 year age group. However, due to workshops being delivered in participating schools the total number of youth participants in V-ball in the Whangarei area in 2010-2011 has been estimated at 650 (Cresswell, 2011).

A number of benefits have been suggested to be available to individuals involved in sport however it is only through participation that these may be experienced. In order for this to occur on a continual basis, it seems advantageous for brief overviews to be presented on the factors affecting youth participation in sport, the reasons for youth participation in, and withdrawal from, sport.

A brief overview of factors affecting participation in youth sport

While there have been a multitude of factors suggested to affect participation in youth sport, it is far beyond the realms of this study to review the expansive wealth of literature covering this area. Given the complexity and vastness of this topic this section presents a brief overview of literature surrounding the factors most relevant to the participation of individuals in youth sport with specific reference to participants aged 11-12 years.

Participation in sport serves many functions; such as the socialisation of children into societies (and cultures) that allow opportunities for participation in environments where healthy lifestyles and health-related behaviours can be encouraged (Hill & Green, 2008) and maintained (Mulvihill et al., 2000). Participation in sport also offers benefits such as:

- Building character and improving physical fitness and skill (Smoll, 2001),
- Providing enjoyable recreational experiences for youth and to encourage social competence (Allender et al., 2006; Smoll, 2001),
- Learning sporting skills which may be used in future sports participation as adults (Ewing & Seedfeldt, 2002),
- Increasing short and long term health and deterrence of boredom and laziness (Mulvihill et al., 2000),
- Assisting the development of positive attitudes toward exercise and participation in sport (NNZ, 2008b), and
- Assisting the development of individuals' positive self-confidence and self-image (Mulvihill et al., 2000; NNZ, 2008b).

It is in the best interest of personal and community health (Tremayne & Tremayne, 2004) for individuals to receive the benefits of regular participation in youth sport.

Participation in sport also has beneficial outcomes with regard to greater family satisfaction (Sabo & Veliz, 2008), contributions to healthy lifestyles (Hill & Green, 2008; Sabo & Veliz, 2008), participants' quality of life and educational achievement (Sabo & Veliz, 2008). For these benefits to be obtained it would seem useful for attention to be paid to the experiences which individuals have in sport and on the promotion and retention of youths' participation. People need to work hard to promote youth sport participation for all, while also endorsing the aforementioned benefits and best interests of participation for individuals and communities (Bigelow et al., 2001). To enable youth to receive the aforementioned benefits of participation in sport it is advantageous that the factors associated with individuals' reasons for participation are identified.

Participation in sport has been considered valuable in consideration of the developmental domains of youth and as a means through which societal values can be transmitted (Brady, 2004). The developmental domains have been identified as physical, social, emotional and intellectual (Brady, 2004; Tremayne & Tremayne, 2004). Reference is made to these domains throughout this study. Participation in sport effects the development of youth across these domains although, as highlighted by Tremayne and Tremayne (2004), development can only occur when individuals are provided with opportunities to participate. This has been supported by Bigelow et al. (2001) who suggested that youth participation in sport should focus on player development and equal amounts of game opportunities being offered to all involved. These opportunities are essential regardless of the race, gender or economic status of the individuals in question (Fraser-Thomas et al., 2005). Receiving opportunities to participate in physical activity in schools and communities are one of three influential factors of youth participation in sport alongside the influence of peers and significant others, and the expectations and attitudes of parents (Mulvihill et al., 2000).

The aims of youth sport participation are to have fun, to develop skills, to develop a love for the game/activity in question and to participate in exercise (Bigelow et al., 2001). Similarly, McCarthy and Jones (2007) indicated that the key focus of participation in youth sport should be on the development of individuals' values and beliefs in sport and their individual identities and motivation. Development of these aspects has been considered crucial determinants of individuals' long-term involvement in sport; a widely discussed topic within literature. The experiences which youth have in sport may significantly impact their decisions regarding continued participation and may affect the enjoyment experienced when doing so (Fraser-Thomas et al., 2005; Tremayne & Tremayne, 2004).

While little research has been undertaken to examine the benefits of sport within a positive youth development framework (Fraser-Thomas et al., 2005), clear evidence has been presented to indicate that youth do experience many benefits through their involvement in sport. Fraser-Thomas and colleagues (2005) presented literature on the positive and negative outcomes of participation in sport in efforts to present an applied sport-programming model and identified two contextual

factors. Firstly, the design of youth sport programmes and secondly, the encouragement of early diversification. Additionally, when literature surrounding the positive and negative outcomes of participation in youth sport was examined, the impact of the coach and/or the influences of parents were identified as being significant. In the resulting review, the need for youth sports to be designed in consideration of the specific developmental needs of participants was highlighted.

While it would be comforting if the previously identified benefits of youth participation in sport were the sole outcomes of individual's involvement, it is important to acknowledge that potential risks to youth also exist when participating in sport. Possible risks to participants in youth sport have been identified as; physical injury due to poor training technique or overuse, psychological stress (for example, due to highly competitive environments) and external pressures and expectations (Tremayne & Tremayne, 2004). The occurrence of these factors may be likely barriers to youths' participation in sport or may contribute to their decisions to withdraw from sport altogether.

Negative experiences in sport have been indicated to affect an individual's potential development across physical, social, emotional and intellectual domains (Tremayne & Tremayne, 2004). Negative experiences may also lead to the increased likelihood of participant withdrawal from sport, decreases in self-esteem and confidence, the occurrence of physical injury and the tendency for increased violence and aggression to occur within competitive situations (Fraser-Thomas et al., 2005).

To determine the patterns and issues that surround youth participation in physical activity Nader and colleagues (2008) conducted a longitudinal study on over 1,000 youths between the ages nine and 15. It was discovered that participation in sport decreased as individuals aged. More specifically it was found that at nine years of age, a majority of children were participating in a recommended 60 minutes of exercise per day. However, by 15 years of age only 31% of participants (on weekdays) and 17% of participants (at weekends) continued the same level of involvement in youth sport (Nader et al., 2008).

Sabo and Veliz (2008) focused on the entry, dropout and re-entry of a national sample of child sport participants in the USA. In their research two nationwide surveys were implemented in the USA. One survey was implemented with 2,185 girls and boys in grades three to 12 (eight to 18 years of age), which investigated a range of topics such as; children's participation in organised sports, their ages of entry into sport (as well as their age of sporting withdrawal) and links between athletic participation and children's emotional and physical well-being. The second survey covered the same range of topics however was conducted through phone interviews with 863 randomly selected parents of female and male children in grades three to 12. It was found that almost 50% of youth sport participants discontinued their involvement at some point while one in 10 organised youth sport participants discontinued their participation altogether. Interestingly, it was also found that a third of the athletes who discontinued their involvement in sport did return to participate at varying stages throughout the future (Sabo & Veliz, 2008). Additionally, regardless of circumstances such as demographic or schooling reasons dropout rates in youth sport increased, for both genders, as participants aged however girls were found to drop out earlier than boys (Sabo & Veliz, 2008). These findings also highlighted the middle school period (11-14 years of age) as a significant stage for youth participation in, or withdrawal from, sport (Nader et al., 2008; Sabo & Veliz, 2008). It is therefore essential that importance is placed on understanding individual's motivations to participate in sport, perhaps more essentially during youth (Brady, 2004). Hill and Green (2008) indicated the importance of youth sport programmes to be developed holistically and with a youth-centered perspective in mind. Furthermore, in their review of literature Hill and Green (2008) highlighted the need for youth sport programmes to be designed with a sound understanding of the characteristics of youth, the reasons for which youth want to participate in sport and, conversely, why their participation may cease. In light of this it is advantageous for literature surrounding the suggested characteristics of individuals, specifically those 11-12 years of age, to be reviewed and briefly explained.

Characteristics of youth.

Participants in the current study are between 11 and 12 years of age. The following section will briefly clarify the characteristics specific to this population with reference to the aforementioned developmental domains; physical, social, emotional and intellectual (Tremayne & Tremayne, 2004).

The physical domain of individuals during 11-12 years of age is the most important period of motor learning for individuals as well as a stage of multi skill learning where experience in a range of basic sport skills is recommended (Canadian Sport for Life [CSFL], 2011; SPARC, 2006). Physical growth may be slow until puberty occurs (SPARC, 2006) although peak height velocity (PHV) could be expected around age 12 in females and age 14 in males (CSFL, 2011). In a more practical sense growth spurts may be common during this stage (SPARC, 2006). Growth spurts and subsequent changes in body proportions occur at differing times and at differing rates for individuals (Malina, 2002), however these may lead to a lack of coordination and an increased injury risk to be experienced due to differing rates of development between individuals' muscular and skeletal systems (SPARC, 2006). It is important that these factors are acknowledged and suitable modifications are incorporated in sports settings to ensure that development, safety, and enjoyment are experienced by participants.

In the social domain, youth sport participants may appreciate a guided and supportive environment from their peers and coaches. In comparison to earlier stages of life, individuals will begin to identify with their peers more so throughout these years (SPARC, 2006). The development of participants' interpersonal skills also occurs during this stage due to increasing respect and consideration being cultivated with those around them while an environment which endorses individuals' autonomy, responsibility and ability to think independently is valued. Being able to perform in sport competently may hold substantial meaning with regard to the relationships youths share with their peers (Tremayne & Tremayne, 2004) at this stage where consistent and fair environments, opportunities to assume simple leadership roles, and the ability to share their

thoughts and ideas are likely to be enjoyed (SPARC, 2006). During this time, participants also experience a sense of belonging through spending time with like-minded individuals in team situations.

With regard to the emotional domain, 11-12 year old participants seek opportunities where feelings of acceptance and worth are perceived and comparisons made to the success of others may be detrimental to individuals' self-confidence (SPARC, 2006). Experiences in challenging situations may be enjoyed during this stage however public failure may not. Importance should therefore be placed on successes being emphasised while the likelihood of failure should aim to be minimised. Positive contributions made to sporting environments by parents have also been suggested as an emotional need of participants during this stage (SPARC, 2006).

In consideration of the intellectual domain of 11-12 year olds, individuals' identities have been suggested to develop while participants will place importance on their autonomy and doing things independently. Moreover, it is during this stage that individual understandings of competition and social comparison will increase alongside the development of leadership skills and problem solving abilities (SPARC, 2006).

A brief overview of the reasons for youth participation in sport.

As mentioned previously, it is beyond the reach of this study to into the extensive topic of youth participation in sport. Within this section however a brief overview is provided of the reasons for youth participation in sport. Key reasons of which have been highlighted as; to be actively involved in the game (Hill & Green, 2008) and to have fun (Bigelow et al., 2001, Kidman, 2005; Mulvihill et al., 2000; Outdoor Foundation, 2008). Additional reasons for youth participation include:

- To improve existing (or learn new) skills and experience thrills and excitement (Brady, 2004; Smoll, 2001),
- To experiment with new skills or challenges (Allender et al., 2006; Bigelow et al., 2001; Outdoor Foundation, 2008),

- To prevent boredom and to gain a sense of well-being (Mulvihill et al., 2000),
- To experience personal accomplishments (Brady, 2004),
- To socialise (Bigelow et al., 2001), to enjoy being around and working with friends (Bigelow et al., 2001; Mulvihill et al., 2000; Tremayne & Tremayne, 2004) and to meet new friends (Kidman, 2005; Smoll, 2001).

Interestingly, competition outcomes (for example, winning/losing), rewards (such as trophies and medals) and various other extrinsic reasons have been identified as being of less importance to children. However, participants of youth sport consider achievement to occur when more intrinsic outcomes such as satisfaction with game involvement and sharing experiences with teammates are obtained (Brady, 2004; Smoll, 2001).

Ewing and Seefeldt (2002) conducted research on the reasons for children's participation in sport by investigating 8, 000 sponsored youth sport participants in the USA. Individuals were provided with a number of reasons for their participation in sport and asked to rank these in order of perceived importance. Results identified that the primary reason for majority of children's participation in sport was to have fun. Additional reasons were identified as; to improve skills, to experience competition, to exercise and become fitter, to participate in something which individuals were good at and to make new (or spend time with) friends.

Additional research has discovered that sporting challenges, testing personal skills, improving competence and for competence to be socially recognised are important to youth (McCarthy & Jones, 2007). Reasons for participation in sport have been found to include the development of social connections, general well-being and the creation of positive outlooks in youth (Weiss & Smith, 1999). Youth's involvement in sport may also be responsible for increased perceptions of satisfaction and positivity (NNZ, 2008b).

A brief overview of the reasons for youth withdrawal from sport.

Similar to other aspects of youth sport participation, the reasons for youths' withdrawal from sport is a topic with considerable depth and complexity. This section therefore provides only a brief overview of literature and previous research on the topic. In one previous study, Sabo and Veliz (2008) found that almost 50% of youth participants discontinued their involvement in sport, rates which increased as participants aged. Similarly, Weinberg and Gould (2011) suggested that out of every 10 children participating in organised sport at the beginning of a season, three to four will no longer participate at the commencement of the following season. Walters (2011) has suggested an apparent trend in youths' in-activity and has highlighted negative health implications for children as a result. These findings and suggestions indicate startlingly high proportions of participant withdrawal from youth sport, which warrant additional investigation.

Reasons for youths' withdrawal from sport have been identified to include:

- Having negative experiences (Brady, 2004),
- Having other interests (Brady, 2004; Sabo & Veliz, 2008), having lost interest in the sport or being tired of playing (Bigelow et al., 2001),
- Perceiving boredom (Bigelow et al., 2001),
- Being too busy or lacking time (Mulvihill et al., 2000),
- Disliking activities which are too highly structured (Allender et al., 2006),
- Experiencing too much pressure (Bigelow et al., 2001),
- Having strained interpersonal relationships with significant others (Sabo & Veliz, 2008),
and
- No longer having fun (Bigelow et al., 2001; Sabo & Veliz, 2008).

Additionally, it has been suggested that participants' experiencing competitive stress in sport may influence their decisions to cease their involvement. Competitive stress may include the influence of significant others such as parents, coaches and peers and the varying psychological factors which exist within competitive environments (Allender et al., 2006; Tremayne & Tremayne, 2004).

Allender et al. (2006) also suggested that youth might experience increased enjoyment when participating in sporting contexts when their participation in sport as a result of being pressured or forced to compete or win.

By comparison, youth who are forced to participate in sport may view their involvement negatively. This may be deconstructive to participant's self-confidence and the confidence perceived (NNZ, 2008b).

A further reason for withdrawal (or non-participation) in youth sport is due to the financial costs which may be incurred through individual's involvement (Ewing & Seedfeldt, 2002; Sabo & Veliz, 2008). This was a view supported by Mulvihill et al. (2000) who believed that additional costs incurred through participation in sport, such as travel and necessary equipment, may result in the view that involvement in sport is too expensive. Moreover, children from higher income families were found to enter sport at a much earlier age (average of 6.3 years) as opposed to children of lower income families who were found to enter sport at an average of 8.1 years of age (Sabo & Veliz, 2008). While the age of initial participation in sport is not the focus of this study these findings support the suggestion that if activities were more affordable they may be more accessible to a wider range of individuals and may result in increasingly regular participation in youth sport (Mulvihill et al., 2000).

In 2008, Hill and Green conducted research over two seasons on five to 10 year old participants of a children's modified soccer programme in order to analyse the effects of implementation of substitution roles, more specifically the resulting exclusion from game participation. Using participant observations and interviews it was found that athletes who were repeatedly given substitution roles were those who were more likely to withdraw from sport or transfer to other teams before the end of the season. These results indicate that receiving opportunities for game participation is crucial to the experiences which individuals have in sport and their retained involvement as a result (Hill & Green, 2008).

To determine sources of enjoyment among children in sport, McCarthy and Jones (2007) conducted research using focus group interviews with two groups of youth (aged seven-12 years) who participated in adult organised sport. McCarthy and Jones (2007) labelled this period of participation as 'the sampling years' (p. 400). One group of participants in the study were aged eight to 10 years while participants in the other group were aged 11 to 12 years. Males and females were included in each group. This research concluded in three key findings with regard to the enjoyment of youth sport participants. Firstly, children experienced enjoyment from both intrinsic and extrinsic sources (through both achievement and non-achievement). Secondly, non-enjoyment was strongly influenced by the involvement of the athlete's parents and/or coaches, and lastly, as participants matured, changes occurred in the relative importance of their peers, coaches and parents as sources of enjoyment. Sources of non-enjoyment were specifically identified as a result of injury, from receiving negative feedback and/or inappropriate emotional and psychosocial support from coaches/parents, or when no feedback was received at all. Additional sources of non-enjoyment were identified as overtraining, experiencing rivalry, perceiving high standards or a lack of personal competence (McCarthy & Jones, 2007).

Sport is an area of life which has the potential to provide opportunities for participants to experience enjoyment and teamwork in contexts where an array of skills from all developmental domains can be improved. Furthermore, sport may provide environments where participants can increase and/or develop their self-esteem, initiative and independence (SPARC, 2006). Physical growth and maturation can be challenged through participation in sport, which may influence not only participants' relationships with peers but also their self-image and perceived self-competence (Malina, 2002). The friendships and relationships an individual may share with team mates can be significantly influenced by individuals' performance in sport, either positively or negatively (Tremayne & Tremayne, 2004) which is of importance as youth identify with their peers at increasing rates as their development progresses (SPARC, 2006). These relationships have a strong influence over individuals' continued participation in sport (SPARC, 2006).

SDT (Deci & Ryan, 2000) can explain how and why identifying and meeting the needs of youth participants in sport may be useful for current and future participation and how this may allow participant retention to be a realistic and achievable expectation. Brady (2004) has suggested that importance needs to be placed on understanding youths' motivation to participate in sport. Exploring the SDT is therefore relevant as it may indicate how an individual's participation in sport meets their psychological needs while providing an insight into the varying types of motivation for their involvement in sport.

Self-Determination Theory

SDT (Deci & Ryan, 2000) is a model of human motivation, which focuses on socio-contextual conditions and assists the natural processes of healthy psychological development and self-motivation. Frederick-Recascino and Morris (2004) have described SDT as a 'theoretical approach specifically directed towards the study of intrinsic and extrinsic motivational processes' (p. 123). One of the main principles of SDT is the fulfilment of essential human needs and the resulting impact on an individual's participation in sport (Deci & Ryan, 2004). In order to reach optimal motivation and to achieve a state of wellness, Deci and Ryan (2000) have suggested that individuals need to experience each of the essential human needs. These human needs, which are recognised as essential, and innate (Deci & Ryan, 2004), have been identified as the basic psychological needs of:

- Autonomy - the need for individuals to be self-initiating and in control of their own actions,
- Relatedness - the need for individuals to feel connected to and accepted by others and their need to obtain a sense of belonging and community, and
- Competence - the need for individuals to function well, to feel competent, confident and effective in their own actions in order to meet their intended objectives (Baard et al., 2004; Blanchard et al., 2009; Deci & Ryan, 2004; Frederick-Recascino & Morris, 2004; Ryan & Deci, 2000; Weinberg & Gould, 2011).

For an understanding of human motivation to occur, it is essential that the psychological needs of individuals are considered (Deci & Ryan, 2000). These needs have been considered innate (Deci & Ryan, 2004), universal and present throughout all stages of human life (Deci & Ryan, 2004) and possessed by every individual (Baard et al., 2004). Due to the innate nature of these needs it could be imagined that individuals would seek opportunities where these needs could be met in order for a 'healthy psychological environment' to be created (Frederick-Recascino & Morris, 2004, p. 123). Sport is an activity that provides participants with opportunities where their needs can be met (Frederick-Recascino & Morris, 2004). More specifically, when an individual views their participation in sport as a choice (and not forced) their involvement could be self-initiated and therefore autonomous (Allender et al., 2006; NNZ, 2008b).

Participation in sport, within a team of similar minded individuals creates opportunities for relatedness to be experienced, while perceptions of competence exist in participants who are able to develop or master their expertise in a skill (Frederick-Recascino & Morris, 2004). By way of definition it may be beneficial to highlight that needs have been referred to most commonly as an individual's motives, wants or desires (Baard et al., 2004). In this way needs have been considered as 'individual-difference variables', the strength of which may predict the outcomes of individuals' interactions with characteristics of specific environments (Baard et al., 2004, p. 2046). Satisfaction is a need when it is empirically associated with the health and growth of a person, however, satisfaction is a desire when it has no association with these outcomes (Baard et al., 2004). Whether satisfaction is considered a need or a desire will therefore be dependent on the individual and the contexts of, and reasons for, their participation in sport.

Motivation is the energy and direction of behaviour (Deci & Ryan, 1985) and is a term that Weinberg and Gould (2011) suggest has often been left undefined, or defined vaguely, and as a result may lead to potential misunderstandings. In efforts to clarify and increase the understanding of this term explanations are provided. The energy is the amount of effort an individual gives to a chosen task. Furthermore, an increased distribution of energy has been suggested to increase individual's motivation (Frederick-Recascino & Morris, 2004). The direction of an individual's

behaviour (or effort) relates to their approach and attraction to, or their investigation of, specific situations or chosen tasks.

A continuum of motivation has been identified and explained to be occupied by the most external dimensions of motivation at one end and by the more internalised dimensions at the other (Deci & Ryan, 2000). As dimensions of motivation are internalised, they have been suggested to become more Self-Determined. There has been considerable research conducted on human motivation (Deci & Ryan, 2000; Edmunds, Ntoumanis & Duda, 2006; Frederick-Recascino & Morris, 2004; Weinberg & Gould, 2011) however it is beyond the scope of this research to go deeply into each of the previously researched dimensions. It has been suggested that the orientation of individuals' motivation will be dependent on where it is situated on the continuum; if participants' motivations are controlled this may indicate extrinsic orientations whereas if their participation is autonomous participants may be orientated intrinsically (Edmunds et al., 2006). A review of literature on this continuum may enable an increased understanding of the previous identified reasons for participation in, and withdrawal from, sport to occur.

Extrinsic motivation has been identified as controlling (Deci & Ryan, 2000) and to occur when an individual experiences a loss in autonomy. Extrinsic motivation in sport may come as a result of individuals perceiving pressure to participate or when a need for status or approval is perceived (Frederick-Recascino & Morris, 2004). Extrinsic motivation may also be evident in individuals who participate in activities in order to satisfy external rewards, for reasons unrelated to the task itself, to meet a demand or to avoid punishment (Deci & Ryan, 2000; Edmunds et al., 2006). The previously identified control and pressure which extrinsically motivated individuals may perceive have been identified to contribute to increased participant dropout rates in youth sport (Frederick-Recascino & Morris, 2004). Support for these suggestions was provided in the findings of Walters' (2011) research on various coaching behaviours at children's sports events (six to 11 year old participants). In Walters' (2011) study, 72 games were observed from the four major sporting codes in New Zealand; rugby union, netball, touch rugby and soccer. Utilising a mixed methods approach Walters (2011) found that at least one child in each of the 72 games observed was told off for

making a mistake or for not following external instructions. These findings identified the presence of both external regulation and extrinsic motivation in youth sport and have been supported in literature where orientations of extrinsic motivation have been suggested as a possible outcome of the reinforcement provided by others (Mageau & Vallerand, 2003; Weinberg & Gould, 2011). Frederick and Ryan (1993) explained that participants who experience higher levels of extrinsic motivation, such as those in Waltersø (2011) research, may have decreased participation lengths or not see themselves involved in sport in the future at all. Extrinsic motivation may also result in individualsøperceiving decreased enjoyment from activities (Weinberg & Gould, 2011).

The type of motivation occupying the opposing end of the continuum is intrinsic motivation. Intrinsic motivation has been suggested to be the most autonomous form of motivation (Edmunds et al., 2006) and defined as a òunique combination of autonomy and optimal challengeö (Frederick-Recascino & Morris, 2004, p. 144). Intrinsic motivation is evident in individuals who participate in activities of interest without òoperationally separate consequencesö (Deci & Ryan, 2000, p. 233) and who strive to be Self-Determining in their quest to master a task (Weinberg & Gould, 2011). It has been suggested that intrinsic motivation is of specific importance to the development of individual identities in youth (SPARC, 2006). Furthermore, the outcomes of intrinsic motivation have been linked to feelings of competence, satisfaction and enjoyment (Deci & Ryan, 2004, Frederick-Recascino & Morris, 2004), to enhance the fun and enjoyment perceived (Weinberg & Gould, 2011) and have been connected to increased self-esteem, positive affect and desire to persist at an activity (Frederick-Recascino & Morris, 2004). Weinberg and Gould (2011) stated that intrinsically motivated athletes enjoy competition and excitement, they want to learn new skills and they participate for the love of sport.

Opportunities for individualsø intrinsic motivation to be experienced frequently are provided through participation in sport (Frederick-Recascino & Morris, 2004). SDT addresses two domains of motivation on the previously explained continuum of motivation (Frederick-Recascino & Morris, 2004; Weinberg & Gould, 2011). As previously mentioned, SDT argues that competence (the feeling of confidence and self-efficacy), autonomy (having input and taking some ownership in

the decision making process) and relatedness (caring for others and being cared for) are three basic needs of all people. It is the degree to which these needs are satisfied (BPNS) that has been indicated to play a significant role in determining an individual's intrinsic motivation. Furthermore, it has been indicated that as individuals experience BPNS in sport their motivation to participate in sport will increase also (Weinberg & Gould, 2011).

Of specific interest to this study is the suggestion that children are most likely to participate in sport for intrinsic purposes, especially in comparison to adults who participate in sport for a combination of both intrinsic and extrinsic reasons (Frederick-Recascino & Morris, 2004). Martens (1996) has lent support to these suggestions indicating that the goals of adult participation in sport are far more performance-based when compared to those of children who intrinsically seek to have fun. Suggestions made by Frederick and Ryan (1993) are consistent with others however add that throughout numerous studies adults have shown participation motives of fun and enjoyment less when compared to youth who included skill development, fitness and challenge as key motives for participation in sport. Self-satisfaction is an additional motivating factor for youth participation in sport. The following section will investigate various definitions of satisfaction and analyse the area of self-satisfaction as experienced by youth participants in sport. Additionally, the influence of programme design on individuals' experiences with various aspects of self-satisfaction in youth sport will be explored.

Self-satisfaction

Athlete satisfaction has been defined as 'a positive affective state resulting from a complex evaluation of the structures, processes, and outcomes associated with the athletic experience' (Chellandurai & Riemer, 1997, p. 135). Athlete satisfaction has also been considered as the extent to which an individual's experiences meet their personal standards (Riemer & Chellandurai, 1998). These personal standards of satisfaction are believed to be based on characteristics of individual's wants, what they believe they deserve and their expectations of current situations and through comparisons to what others receive (Chellandurai & Riemer, 1997). While there has been

substantial research conducted on individuals' satisfaction specific to workplace settings (see Baard et al., 2004) it has been acknowledged that athletes should be regarded differently in this manner. Individuals in sport should be treated as athletes with a primary focus being placed on the enjoyment and satisfaction they experience (Chellandurai & Riemer, 1997). In light of these acknowledgements, research has been conducted on participant satisfaction as specific to sports settings (see Chellandurai & Riemer, 1997; Johan, Lonsdale & Hodge, 2011).

Chellandurai and Riemer (1997) identified that no previous efforts have been made to create a definition or to identify the facets of satisfaction in athletes (although previous attempts have been made to develop an athlete satisfaction scale). In addition, only limited endeavours have been made to assess participants' reactions to their experiences in sport. In light of these acknowledgements Chellandurai and Riemer (1997) conducted research to investigate athlete reactions to their experiences in sport and made efforts to develop a preliminary classification of the relevant facets of satisfaction. This work not only resulted in the previously stated definition of athlete satisfaction but also provided an identification of the crucial facets of athlete satisfaction. These facets were identified as being of task and social orientations with relevance to both individuals and teams (see Appendix A). In classifying these facets, Chellandurai and Riemer (1997) discovered that specific aspects of athlete satisfaction could be identified. In a practical sense these identifications enable attention and effort to be directed to specific areas acknowledged as causes of athlete dissatisfaction. By way of example, an athlete who is unsatisfied with the belongingness or relatedness they perceive within their team may be able to identify and direct their attention and efforts to this aspect for the concern to be addressed.

In their research, Chellandurai and Riemer (1997) also suggested that information surrounding the athletes' perceived satisfaction through participation in sport may be useful as a direct measure of the effectiveness of sports programmes or organisations. This is due to the fact that facets measured in their study covered a majority of the operations which are present in many sports programmes. This measurement may provide worthwhile information for sports organisations with regard to awareness of their programmes ability to meet the needs of its participants and enable perceptions

of satisfaction to occur. Chellandurai and Riemer (1997) also placed importance on athlete satisfaction being measured directly from the perspectives of participants themselves and highlighted that doing so should be paramount for sports organisations. Eys, Loughead, Bray & Carron (2009b) reinforced this, stating that individual participant perceptions were vital to the endeavours of sporting programmes. Therefore, research conducted on participant perceptions of their experiences in a sport may identify specific areas of a programme's design which may need additional development.

Chellandurai and Riemer's (1997) classification of facets of athlete satisfaction was a crucial factor in the development of the ASQ developed by Riemer and Chellandurai (1998). Although the importance of identifying athlete perceptions in sport has been recognised few studies have been conducted to investigate the determinants of athlete satisfaction (Riemer & Chellandurai, 1998). An explanation of the ASQ is relevant to the current study as it will investigate participant perceptions of self-satisfaction in specific sporting activities, the results of which may add to the void in research suggested by Riemer and Chellandurai (1998). In their research, Riemer and Chellandurai aimed to develop a specific measure of the facets of athlete satisfaction in sport while also enabling the identification of the aspects of most importance. The resulting ASQ has been described as being easy to understand and to implement, as having sound psychometric properties and as being useful across various settings (Riemer & Chellandurai, 1998). The ASQ utilises 15 subscales of the most salient aspects of athletic participation (such as leadership, the team, the organisation and the individual) as well as the performance of these aspects. As a result of implementation of the ASQ, significant elements of a participant's experiences in sport have been identified. These include the extent to which individual's performance is facilitated by the team and if the team provides the social support necessary for the individual.

In summary, the elements of sport that have been identified as potential influences on participant satisfaction are:

- Opportunities for social interaction,

- Experiences of skill improvement (however the opposite may result if no improvement is perceived),
- The quality of competition available, and
- When an individual's efforts are recognised by significant others (Carron & Dennis, 2001).

It is when these aspects of participation in sport are satisfied that the cohesion experienced by individuals or groups can increase (Carron & Dennis, 2001). While the influence of significant others can on one hand have positive outcomes, it is important to acknowledge that participant dissatisfaction can be a potential outcome. Examples of such dissatisfaction may occur due to athlete's relationship with their significant others (Carron & Dennis, 2001) or as a result of pressures and expectations being placed on them by their significant others (Kidman, 2005).

Chellandurai and Riemer (1997) identified that athlete satisfaction in youth may stem from the occurrence of various factors, not just that of wins or losses. Instead, participants who have been defeated on the scoreboard may have experienced high levels of satisfaction due to various factors of their involvement in sport, such as the effort exerted or the teamwork experienced. Therefore, youth sports that emphasise skill development, fun and communication (as opposed to endorsing competitive and pressured environments) may create opportunities for participants to experience self-satisfaction and team cohesion.

As literature surrounding participant satisfaction in youth sport has thus far been reviewed it is now important that consideration of cohesion within team environments be made. The following section will define team cohesion and will review literature surrounding factors of its development and maintenance. Within the following section, the suggested barriers to cohesion will be identified and research conducted on youth perceptions of cohesion will be presented.

Team cohesion

Key reasons identified for youths' participation in sport is to meet new friends (Kidman, 2005; Smoll, 2001) or to be with current friends (Tremayne & Tremayne, 2004). Therefore it is

unsurprising that McCarthy and Jones (2007) have highlighted friendships and social involvement to be sources of enjoyment for youth in sport. While perceptions of cohesion vary between individual participants it is the combined perceptions of the participants of a team that will consolidate them into a cohesive unit (Carron & Dennis, 2001). Cohesion requires group members to possess similar reasons for participating in sport and for individuals to strive toward a common team goal (Jones, 2010). For participants of sport to belong to a group in the first instance suggests a level of connection is present among them. Team members will therefore already have a vested interest in developing and maintaining group cohesion. This is of importance as without cohesion it is believed that no group development or maintenance can take place (Eys & Carron, 2001).

Perceptions of relatedness have been highlighted as a human need (Deci & Ryan, 2004) and as a characteristic of youth sport participants (SPARC, 2006). Therefore participant perceptions of team cohesion may be influential to youth's decisions regarding current and continued participation in sport. Cohesion has been identified as an essential factor in the existence of a team (Prapavessis, Carron & Spink, 1996). While cohesion has been defined as; 'a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs' (Carron et., in Duda, 1998, p. 213). Cohesion has also been explained as a process that possesses dynamism and shows interaction, activity, vitality and multidimensionality (Carron & Dennis, 2001). The following points expand on the dynamism of cohesion:

- 1) The multidimensionality of cohesion incorporates both task and social orientations,
- 2) By using the term 'dynamic' (Carron et al., in Duda, 1998, p. 213) the state of cohesion is referred to as neither static nor moving but changeable through time and experience,
- 3) Cohesion can be considered instrumental; all groups, regardless of their orientation (social or task) can be believed to have a purpose,
- 4) Social relationships within a team may be established as the team begins or may develop over time; either way cohesion is believed to possess an affective function (Weinberg & Gould, 2011),

- 5) The objectives and goals which all groups possess may be varied and complex (Carron & Dennis, 2001).

For the study of cohesion in sport to occur systematically, and to further explore the multidimensionality of cohesion, Carron (1982) developed the Conceptual Model of Cohesiveness (Figure 3). The dimensions of cohesion included in this model have been identified as task and social. More specifically, task cohesion has been described as the extent to which a team works together in the aim of achieving a task, which is considered the basis of teamwork (Brawley et al., 1987). While social cohesion has been described as the interpersonal attraction experienced by members of a group as well as the extent to which team members like each other and enjoy being in each other's company (Weinberg & Gould, 2011).

The premise of task and social cohesion is that individual perceptions of cohesion can be influenced by two forces, firstly, group integration (GI) and secondly, individual attractions to the group (ATG) (Brawley et al., 1987; Carron, Widmeyer & Brawley, 1985; Weinberg & Gould, 2011). GI signifies the team as 'the closeness, similarity and bonding within the group as a whole - the degree of unification of the group' (Carron et al., 1985, p. 248). ATG has been described as attractions to the team as experienced by the individual or 'the interaction of the individual member's feelings about the group, their personal role involvement with other group members' (Carron et al., 1985, p. 248). It has been suggested that both of these categories (GI & ATG) include both task (T) and social (S) team characteristics (Hodge, 2004, p. 222):

- Individual attraction to the task (ATG-T)
- Individual attraction to the group (ATG-S)
- Group integration to the task (GI-T)
- Group integration to the group (GI-S)

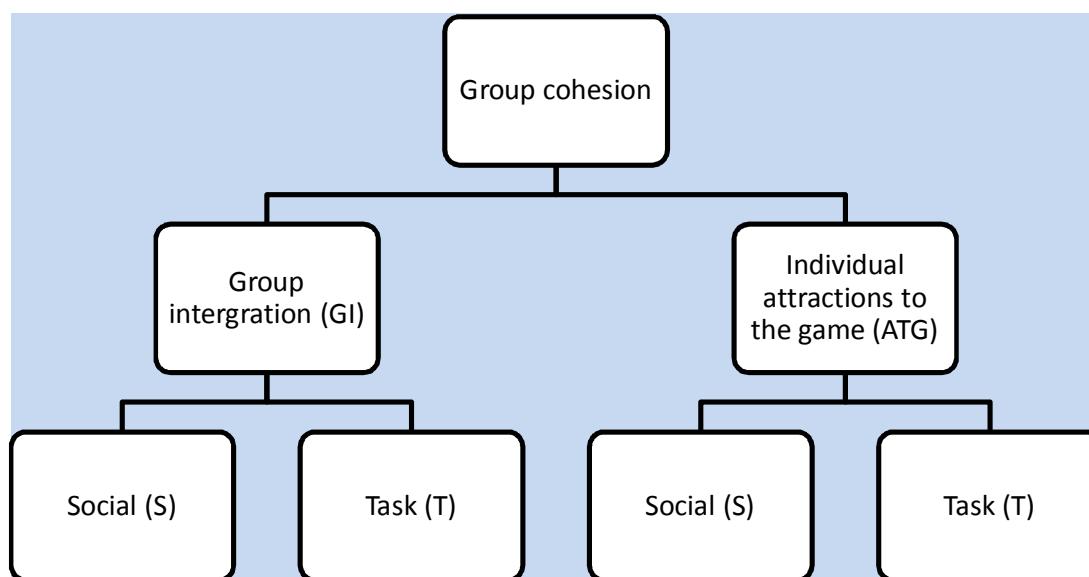


Figure 3: Carron's (1982) Conceptual Model of Cohesiveness (source: Weinberg & Gould, 2011, p. 185).

The Conceptual Model of Cohesiveness (Carron, 1982) is based on the idea that cohesion is dynamic (Carron & Dennis, 2001). In other words, cohesion can be expected to build, decline, and build again (Brawley et al., 1987) and continue to do so throughout a team's existence (Carron & Dennis, 2001). This model specifically identifies four areas suggested to affect the development of cohesion including: environmental factors (such as team size), personal factors (for example, motivation), team characteristics (such as team stability and team norms) and leadership (for example, leadership styles and goals). It is as these areas interact with each other that both task and social cohesion are suggested to be affected (Weinberg & Gould, 2011). Carron's Conceptual Model of Cohesiveness (1982) predicted that team members will hold views regarding their personal attraction to the team as well as opinions on how the team functions as a unit (Hodge, 2004). This model therefore has the potential to show how and why various outcomes in exercise environments can be predicted through perceived cohesion (Loughead, Patterson, & Carron, 2008).

The Group Environment Questionnaire (GEQ), designed by Carron et al. (1985), has been implemented to measure cohesion and to distinguish between individuals and groups and between orientations of task and social cohesion. Using the GEQ previous research investigated if athlete

perceptions of cohesion at the end of one sporting season could be an effective indicator of sporting participation in the following season (Spink, 1995). At the completion of the season for two female ringette teams (both recreational and elite) the GEQ was distributed and completed by members of both teams, as well as an individual questionnaire on their intentions of participation in the following season. Both teams included participants between the ages of 16-22 years of age. The main finding was that positive athlete perceptions of cohesion were related to intended participation in the following season. A secondary finding was that athletes who indicated their intentions to participate in the following season measured higher in social cohesion (ATG-S) than those who indicated they would cease their involvement. These findings would indicate that when looking to retain athletes in sport it is essential for importance to be placed on their experiences and resulting perceptions of cohesion.

Some of the early research on youths' perceptions of cohesion in sport used the Conceptual Model of Cohesiveness, most typically in the form of questionnaires (Carron, 1982; Carron et al., 1985). It has been argued however, that these questionnaires were not designed age appropriately for youth audiences and therefore may not produce data representative of the specific population (Eys et al., 2009a). To address this, Eys and colleagues (2009a) developed the YSEQ as a measurement of cohesion specifically for youth populations. In doing so, two phases of development took place. In the first phase semi-structured interviews, open-ended questionnaires and a literature search on cohesion and youth participation in sport were used. Phase two involved the development of the YSEQ. To indicate an increased level of validity within the questionnaire findings, mixed stem questioning was used (where combinations of both positive and negative questions were included). Additionally, attention was directed to inclusion of the Conceptual Model of Cohesiveness (Carron, 1982) and the language used throughout the questionnaire. The language used aimed to be recognisable to youth while remaining genuine in gaining relevant and reliable data. Additionally, spurious items were added in order to address issues of response acquiescence and item wording. A key finding was that younger individuals did not make distinctions between the conceptual dimensions of cohesion (as identified in the GEQ) as clearly as some adults. Therefore, both task

(AV Task) and social (AV Social) dimensions of cohesion were measured. The resulting YSEQ was found to demonstrate 1) good initial psychometric properties, for example, factor structure and internal reliability of task and social dimensions, 2) content validity through expert and youth examination and 3) appropriate readability levels for the intended population (Eys et al., 2009a).

Further investigations of participant perceptions of cohesion in sport occurred through the implementation of focus group research to gain an understanding of what cohesion meant to 56 athletes in youth team sports (Eys et al., 2009b). Athlete perceptions were measured in consideration of; definitions of cohesion, indicators of cohesive/non-cohesive groups and methods implemented in attempts to develop cohesion within groups. Five main findings occurred in this research. Firstly, support was identified to exist for the use of a deductive approach to grouping responses into either task or social categories. Secondly, it was found that it was necessary for cohesion (among peers) to be considered as distinct from, but related to, coach-athlete issues. Furthermore, it was found that affective, cognitive and behavioural representations of various interactions and relationships merged to form more abstract concepts of cohesion. It was also found that youth viewed cohesion as multidimensional, containing both task and social elements. Lastly, activities for developing cohesion were found to range from the initiation of simple interactions (such as getting to know each other), to the creation and nurturing of relationships as well as promotion of the larger cohesive group. Acknowledgement of these findings may enhance future understanding of participants' perceptions of cohesion in youth sport (Eys et al., 2009b), consideration of which is relevant in the current study.

While the presence of cohesion has been identified as both essential and beneficial for youth sport teams, it is important not to overlook the fact that barriers to cohesion within teams may also exist. Examples of barriers to cohesion include; disagreements within teams regarding group goals, frequent turnovers of team members, power struggles among individuals (Weinberg & Gould, 2011), conflict regarding task or social roles within the team and communication breakdowns among team members (Carron & Dennis, 2001; Weinberg & Gould, 2011).

As perceptions of self-satisfaction and team cohesion are investigated in the current study it is important that game characteristics specific to netball and V-ball are explained. The following section will review literature on the game modifications of decreased team size and positional rotation with specific reference to the possible impact of these game adaptations on the self-satisfaction and team cohesion experienced by participants.

Group size.

A group has been defined as a number of individuals who are interdependent, to some extent, due to a type of relation shared between one another (Morris & Summers, 2004). The following are characteristics that have been specified in literature as being essential to the existence of a group:

- The presence of group processes such as communication (Carron & Dennis, 2001) and social and task interaction (Hodge, 2004; Woods, 1998) between group members,
- The groups' possession of a collective identity (Woods, 1998) and adoption of a categorisation of identity, for example 'we' and 'they' (Carron & Dennis, 2001, p. 121),
- The presence of shared objectives (Woods, 1998) and fates (Carron & Dennis, 2001) among group members,
- A sense of interpersonal attraction between group members (Woods, 1998),
- The presence of mutual awareness (Hodge, 2004) and mutual benefit (Carron & Dennis, 2001) among group members, and
- A demonstration of social structure by the group, such as; norms, status and roles (Carron & Dennis, 2001).

Teams are a special type of group, they have a collective identity and are required to work together to achieve their goal(s) (Hodge, 2004). While team members' reliance on one-another has been identified to increase the cohesion experienced among teams. This reliance was also found to increase participants' perceptions of belongingness and, as a result, enhance their perceptions of self-satisfaction (Hill & Green, 2008).

Widmeyer and colleagues (1990) conducted further research on the influence of group size in sport and investigated the social psychological effects of sports participation. The GEQ (Carron et al., 1985), skill assessments and expert evaluations were used to determine the impact of satisfaction for teams of varying sizes (three, six, nine and twelve participants). Firstly, the total number of athletes on a team roster was considered followed by the number of athletes competing at any one time. It was found that both performance and team cohesion were affected by the size of the group, more specifically; as group size increased the responsibility, strategy, exercise, enjoyment and cohesion experienced by individuals decreased. In larger team sizes, decreased enjoyment led to higher rates of athlete turnover and decreased player retention. With regard to team cohesiveness, moderate sized groups showed the most positive results when compared to that of smaller or larger sized groups (Widmeyer et al., 1990). Additionally it was found that as participant numbers in a group increased, the number of opportunities individuals had to satisfy their specific needs lessened (Widmeyer et al., 1990). These findings are supported by those of Hill and Green (2008) who found that individuals' perceptions of participation were highly influenced by group size. Group size is therefore an aspect which warrants specific attention in youth sport as increased group size may lead to outcomes of decreased satisfaction and uncertainty surrounding future participation.

Comparatively, smaller sized groups provide athletes with increased time on task and increased engagement in development situations (Hill & Green, 2008), increased opportunities to experience feelings of both social significance (Hill & Green, 2008; Widmeyer et al., 1990) and increased cohesion (Woods, 1998). Increased cohesion has been indicated to heighten the likelihood of bonding among team members (Carron & Dennis, 2001; Holt & Sparkes, 2001; Weinberg & Gould, 2011) from which the development of cohesiveness may occur.

The development of cohesion appears to be supported by positive experiences of communication between team members however the relationship between communication and increased cohesiveness has been suggested to be circular (Carron & Dennis, 2001). More specifically, communication among team members (around social and task aspects) has been suggested to result in increased cohesiveness while groups with increased cohesion are suggested to experience

increased communication (Carron & Dennis, 2001). It could therefore be suggested that in sport with smaller team sizes increased cohesion and communication between a wider range of team members would be likely.

As explained in Chapter one: Introduction, traditional netball teams have seven players per team while V-ball, as indicated by the game's title, has five players per team. Another important modification which has been made in V-ball's design occurred to the on court positions and the rules regarding positional substitution (Gunson, 2012). The rules of traditional netball allow positional rotation to occur during the game in permitted scenarios such as; injury, in quarter or half time breaks or at the umpire's discretion (NNZ, 2008c). Comparatively, positional rotation is a game modification, which has been implemented in the creation of V-ball and provides participants with repeated opportunities to develop a wider range of skills and game understanding through exposure to each position. Due to less time spent in substitution roles, positional rotation offers V-ball participants increased opportunities for involvement in game play. The wider skill development of youth sport participants has been supported by suggestions that during youth involvement in sport the focus should be on participation, variety and overall sports skill development, as opposed to early specialisation (CSFL, 2011; SportNZ, 2012b).

Positional rotation.

The traditional netball game does not utilise positional rotation however positional substitutions are permitted in specific circumstances throughout the game. The implementation of positional rotation however allows participants to gain experience using the skills and game concepts required in each of the roles of the game while also decreasing the time which individuals spend on the side line. Positional rotation may allow opportunities for maximum development to occur in a wider range of game skills, concepts and understandings, alongside the promotion of a broader range of developmental experiences (Côte et al., 2009). This may therefore allow developmental opportunities in the aforementioned physical, social, emotional and intellectual domains (Tremayne & Tremayne, 2004) and may limit the likelihood of individual specialisation to one area of play.

Positional rotation is a game modification which also has the potential to meet the identified needs of youth athletes such as having varied experiences as well as the assurance of receiving equal involvement (SPARC, 2006).

Athletes who have been perceived as being less skilled than their peers have commonly been those left on the side line or not included in game play (Tremayne & Tremayne, 2004). This may deprive participants (arguably those most in need) of the playing time and experiences required for development to take place across all developmental domains (see Tremayne & Tremayne, 2004). As the development of individuals is one of the aims of participation in youth sport (Smoll & Smith, 2002), it would seem beneficial for substitution roles to be minimised, if not eliminated altogether, from youth sport. Positional rotation may be one method which when implemented may combat these developmental issues by ensuring participants spend less time on the side line and more time actively engaged in game-like situations and developmental opportunities. Game designs which implement positional rotation indicate that importance has been placed on the needs of youth via allowing experiences and enjoyment of various activities and play to occur (Côte et al., 2009; Hill & Green, 2008).

As previously mentioned, Hill and Green (2008) conducted participant observations and interviews over a two-season period with coaches, five to 10 year old players and players' parents in order to investigate their perceptions of involvement in youth sport. When positional rotation was implemented, and substitution roles did not exist, individual and team skill development, satisfaction and enjoyment and confidence were found to increase. Furthermore, withdrawal rates of youth participants reduced when substitution roles were eliminated and attendance and participation were encouraged. Hill and Green (2008) have subsequently recommended, particularly in non-contact youth sports, that substitution roles are eliminated. By comparison, when positional rotation is not implemented, specialisation (or isolation to one area of play) may be a likely outcome of an individual's participation. Specialisation has been defined as involving 'athletes limiting their athletic participation to one sport which is practiced, trained for, and competed in throughout the year' (Hill & Hansen, 1988, p. 76). Similarly, Côte et al. (2009) have

explained early specialisation to be high volumes of deliberate practice, as opposed to low amounts of deliberate play, early in an individual's participation in sport. Of interest in the current study are individual's specialisations to playing positions and roles as well as the subsequent isolated game understanding and skill development which may occur in the absence of positional rotation.

It has been suggested that youth participation in sport should occur in the form of deliberate play during childhood which has suitably been labelled 'the sampling years' (Côte et al., 2009, p. 9). This label has been similarly used in research by McCarthy and Jones (2007, p. 400) however with reference to youth, seven to 12 years of age. The stage which follows has been labelled 'the specializing years' and is suggested to occur at 12-15 years of age (Côte et al., 2009, p. 13) and 13-16 years (McCarthy & Jones, 2007, p. 400). This categorisation has indicated that participation in sport prior to 12 years of age should occur throughout varying sports codes and positions. These suggestions have been supported by Rushall and Pyke (1990) who suggested that no specialisation should take place in children. Support is seen for these suggestions in literature where positional specialisation is indicated to occur in the stages which follow childhood (after 13 years of age) where skill development becomes increasingly sport specific (McCarthy & Jones, 2007).

Hill and Hansen (1988) have suggested that if the best interests of youth sport participants are to be met it is imperative that their age and varying developmental stages are considered. Most sports, including netball, have been considered late specialisation sports, where it has been suggested of most benefit for participants to gain experience in fundamental movement patterns prior to physical maturation and before specialising in any one sport or playing position (CSFL, 2011). Côte and colleagues (2009) have supported these suggestions adding that elite performance in sport often follows a period of sampling. The experiences had during sampling periods such as these may ensure the balanced growth and general development of individuals (Rushall & Pyke, 1990). Sabo and Veliz (2008) have suggested that late entry into sport, without a prior period of sampling, may affect individual's development therefore endorsing the placement of importance on participation in a period of sampling during youth. Furthermore, children who participate in a variety of sports (and therefore various environments and positions) will be provided with opportunities to gain the

psychological, personal and foundational physical skills which may be required in future participation, once one sport (or position) is chosen for specialisation (Côte et al., 2009).

Importantly, it has been suggested that the initial abilities of participants have little relation to the abilities they may possess in the future (Brady, 2004; Côte et al., 2009; Hill & Green, 2008). The use of positional rotation in sport is therefore an approach that appears to fit well with these suggestions, specifically with regard to the characteristics of youth and the reasons provided for their participation in sport.

Reasons for the occurrence of early specialisation are not always consistent with the reasons that youth have provided for participating in sport (Côte et al., 2009). Early specialisation in sport has been suggested to:

- Shorten peak performance (Côte et al., 2009),
- Have potentially detrimental effects on individuals and their perceptions of participation (CSFL, 2011),
- Limit participant enjoyment and restrict individual development (NNZ, 2007b), and
- Be linked to early withdrawal from sport (Côte et al., 2009).

Psychologically, early specialisation has been suggested as a possible cause of future regret due to individuals missing opportunities to utilise athletic skills (Hill & Hansen, 1988) or to experience their athletic potential (Rushall & Pyke, 1990). The occurrence of early specialisation has also been suggested to result in fundamental skill stages being neglected potentially requiring the implementation of remedial strategies in future (CSFL, 2011).

In the absence of positional rotation, some athletes may be left on the side line or to experience isolation to one area of play. In this instance participants may be deprived of opportunities for game involvement where their reasons for participation in sport may have been met. In light of this the importance of positional rotation in youth sport has been highlighted, as has its ability to allow fundamental skill development in a wider range of game aspects to occur and to provide adequate

exposure to all areas of participation through increased time on task. Positional rotation therefore appears to have the potential to meet the needs of youth when participating in games which implement this modification.

The effect of modified games.

Thorpe (in Kidman, 2005) identified that the reasons provided by youth for their participation in sport may not necessarily be satisfied if traditional methods of coaching are utilised. In the traditional learning approach, skills are often taught using drills, with the coach taking decision-making and problem-solving roles (Butler & Griffin, 2010). These traditional approaches have been comprised of the development of skills and techniques outside of game contexts and indicate the presence of a content-based approach (Butler, Griffin, Lombardo & Nastasi, 2003) more commonly used with adult participants. Werner et al. (1996) noted that youths' comprehension of such games (those designed for adults) might be out of reach for many. The implementation of practices away from traditional sporting models have been supported in literature through suggestions that doing so is important in the skill learning process of individuals (Gabbett et al., 2009) and when aiming to enhance the participation and satisfaction of those involved (Werner et al., 1996). Furthermore, participation in youth sport which implement game modifications have been linked to increased participant perceptions of self-satisfaction and team cohesion (Hill & Green, 2008).

The Teaching Games for Understanding model (TGfU), developed by Thorpe and Bunker during the 1970s-1980s (Butler et al., 2003), uses games modified from traditional versions of sport. The use of modified games has been suggested to enable the needs of youth participants to be met (SPARC, 2006). The use of game modifications may be an approach which creates a more relevant environment for youths' participation and may allow their specific needs to be met while the inclusion of more traditional tactical aspects of the game can remain. Likewise, Butler and Griffin (2010) have expressed that modified games may be of higher value to participants. The use of traditional games have been suggested to cause participants to experience disempowerment and

decreased personal motivation, not only to improve their skills but to continue their participation in sport at all (Thorpe, in Kidman, 2005). In the design of modified games tactical aspects of the game remain, while an environment where understanding, practical skills and the application of these can be created, and experienced within actual game contexts. In comparison to traditional sports, modified games may be increasingly comprehensible for youth participants and could provide positive environments which are challenging regardless of individuals' competencies or lack thereof.

As a part of the TGfU approach, when learning the game in question, skills may be added to the game at a pace which is specific and beneficial to participants' understanding (Pill, 2006). Butler et al. (2003) have similarly identified that the use of modified games may allow athlete-centred coaching to occur. One of the suggested aims of this approach is for an increased amount of the athletes' developmental needs to be met while opportunities are provided for their skills to be transferred to other game situations where and when the athlete believes they are appropriate (Hubball et al., 2007).

Early adolescence is an important period of psychological development (Côte et al., 2009). The TGfU approach has been suggested as one, which provides benefit for the psychological domain of individuals through providing relevant decision-making opportunities (Gabbett et al., 2009) that may be present among tactical, technical and attitudinal aspects of modified games (Kidman, 2005). The TGfU approach may also motivate participants to consider including sport in their daily lives, not only as a means of improving their perceptions of competence and performance but also to experience enjoyment, satisfaction and to make on-going contributions toward a healthy lifestyle (Balakrishan, Rengasamy & Aman, 2011). Game modifications which may be included in the TGfU approach have the ability to positively affect BPNS such as relatedness (Deci & Ryan, 2004) and possess the ability to increase players' perceptions of team cohesion (Hill & Green, 2008).

TGfU approaches have also been endorsed from a physical perspective. Rushall and Pyke (1990) have suggested that the greatest improvements to an athlete's performance can occur when sports

specific movement patterns and physiological requirements are included in games. Similarly, Gabbett et al. (2009) have identified that TGfU may be an effective method to reproduce the overall demands of a sport.

Hill and Green (2008) have further endorsed the implementation of modified games in youth sport. In their research it was found that participants of youth sport which utilised positional rotation experienced greater athlete satisfaction, enhanced social climates and increased opportunities for skill development and enjoyment. Co-operative activities which support such enjoyment (experienced through friendships with team mates) can be utilised as part of a modified game approach and provide opportunities for leadership, decision making, responsibility and independence to occur (Butler & Griffin, 2010).

An overview of the validity of the TGfU approach has been provided in previous research through comparisons being made to the more traditional technique of learning a skill (Turner, 1996). In Turner's study two different teaching approaches were used (traditional teaching and TGfU) with four randomly assigned teaching groups. Pre-tests occurred through skill tests, knowledge tests and decision-making tests, while interviews were held to investigate participants' perceptions of the instruction given. After a 16-week teaching period, post-tests were implemented in the same approach as the pre-tests. Turner (1996) discovered that an increased amount of enjoyment, satisfaction and motivation (to participate) occurred when the TGfU approach was used. This finding has been supported by Butler et al. (2003) who identified that participants who were less able than others have considered TGfU approaches as fun. Balakrishan et al. (2011) conducted a study on 72, 10-year-old primary school students to explore the effects of implementation of the TGfU approach on participants' cognitive learning outcomes. In their study, pre and post-tests were implemented with groups who were exposed to either a traditional learning approach or a TGfU approach. It was found that the TGfU approach had the ability to enhance the decision making and tactical understanding of youth participants. Additionally, it was found that when athletes who encountered the TGfU approach were provided with opportunities for future sporting involvement

they not only had increased ability but also possessed enhanced desire to participate (Balakrishan et al., 2011).

Modified versions of adult sports have been provided internationally (for example in NZ, Australia, UK, and USA) in various sporting codes such as ō Minkeyö a modified version of field hockey and ō Roo-ballö a modified version of soccer (Hill & Green, 2008, p. 186). These and other modified games have been implemented with the primary intention of increasing the satisfaction and enjoyment experienced by participants. Moreover, individuals' experiences with modified games may have positively affected their desire for future participation in sport (Hill & Green, 2008) and lead to benefits such as obtaining healthier lifestyles (Werner et al., 1996). The implementations of modified games in various sporting codes internationally as well as the suggestions and findings, which have been provided in literature, appear to have indicated support for the use of modified games.

Self-satisfaction and team cohesion.

Youth participate in sport for a number of reasons such as; wanting to make new friends (Kidman, 2005; Smoll, 2001), to have fun (Bigelow et al., 2001; Mulvihill et al., 2000) and to learn new skills (Brady, 2004; Smoll, 2001). It has also been suggested that in sport youth enjoy identifying themselves as team members and perceive a sense of belongingness within team environments (SPARC, 2006) which satisfies a need to experience relatedness (Weinberg & Gould, 2011).

Jeffery-Tosoni, Eys, Schinke and Lewko (2011) investigated perceptions of satisfaction and cohesion in non-starting and starting athletes in youth sport teams. To measure participant satisfaction the ASQ (Riemer & Chellandurai, 1998) was distributed alongside the YSEQ (Eys and colleagues, 2009a) to assess individuals' perceptions of cohesion. It was found that non-starting athletes perceived less social cohesion and less satisfaction when compared to starting athletes. Perceptions such as these may be remediated through attempts to remove notions of starter/non-starter status from team environments (Jeffery-Tosoni et al., 2011). Positional rotation (and the resulting absence of substitution roles) is therefore a game modification which may allow higher

game participation opportunities for all team members while increasing their opportunities for interpersonal interaction.

In Holt and Sparkes (2001) season long research on the cohesiveness of an England University XI football team (ages 18-27 years) the factors contributing to team cohesion were identified and examined. Participant observations, formal and informal interviews, documentary sources, a field diary and a reflexive journal were implemented with 13 players. Individuals' perceptions of satisfaction were identified as the most important factor in the development of both social and task cohesion. These findings highlighted a relationship between individuals' perceptions of self-satisfaction and the resulting feelings of team cohesion which participants experienced. These findings have been supported by Hill and Green (2008) who similarly found participant perceptions of team cohesion to lead to increased satisfaction. Therefore it is apparent that both satisfaction and cohesion are important and influential factors to youths' experiences and resulting perceptions of participation in sport and on their views regarding continued participation.

Summary

This literature review has provided an insight into the importance and influence of perceptions of self-satisfaction and team cohesion in youth sport participants. Perceptions of these factors have been closely linked with satisfaction of the basic psychological needs as identified in the SDT as competence, relatedness and autonomy. Importantly this review of literature has provided a context for which further understanding can occur with regard to the current study. The characteristics of youth and their reasons for participation (and withdrawal) from youth sport programmes have been presented. The implementation of modified games have been identified to be worthwhile during youth with regards to meeting individuals' needs through participation while providing opportunities for development to occur across a wide range of domains. Literature surrounding the game modifications of decreased team size and positional rotation has also been reviewed as relevant to the sports investigated in the current study; netball, and the modified netball game, V-ball.

CHAPTER THREE: METHODOLOGY AND METHODS

This study's methodology is introduced in this chapter including specific information regarding the research design. The use of pilot studies is explained, as are the research setting, participants and process of data collection. The data collection tools used are also identified and their design explained. This chapter is concluded with a description of the data analysis procedures used in order to clearly identify the processes of gaining information, the steps of data analysis and the interpretation of results.

Methodology

This study implemented a mixed methods research (MMR) methodology in order to understand the research phenomena as comprehensively as possible. In order to provide a conclusive definition of MMR Johnson, Onwuegbuzie and Tuner (2007) brought together 19 definitions of the methodology. The resulting definition was; "the type of research in which a researcher team or team of researchers combines elements of qualitative and quantitative research approaches.....for the broad purposes of breadth and depth of understanding and corroboration" (p. 123). Figure 4 presents the methodological overview which provides a framework of this study's methodology and design.

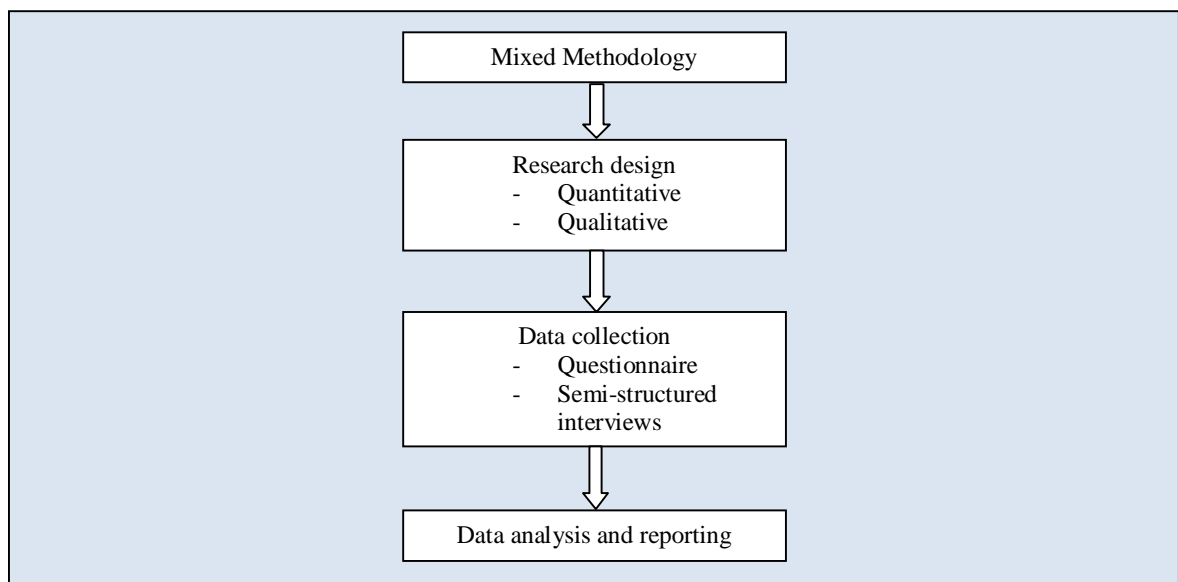


Figure 4: Methodological overview.

Research design

As the interest of this study was to gain insight into the perspectives and feelings of participants, the implementation of either qualitative or quantitative methods (independently) may have been considered suitable options. However, to answer this studies RQs the use of both qualitative and quantitative research in a mixed methodology enabled the independent strengths of each method to add depth to the results gathered during data collection. For this reason the approach of MMR was used. This was a view encouraged by Gay, Mills & Airasian (2009) who described MMR as "building on the synergy and strength that exists between quantitative and qualitative methods to understand a phenomenon more fully than is possible using either quantitative or qualitative methods alone" (p. 462). This definition was further endorsed by Johnson et al. (2007) who suggested that mixed methodologies may allow "the most informative, complete, balanced, and useful research results" (p. 129).

MMR has been identified as a third research paradigm alongside both quantitative and qualitative research (Johnson et al., 2007). According to Denzin and Lincoln (2011) MMR originated in the late 1970s, initially used in quantitative research where qualitative research characteristics were considered capable of increasing the comprehension of data comparatively to that able to occur from quantitative research findings alone. It has been highlighted that the varying research paradigms (qualitative and quantitative) should not be considered as antagonists (Gay et al., 2009; Scott & Morrison, 2006) instead when "taken together they represent the full range of educational research methods" (Gay et al., 2009, p. 8). MMR may therefore allow the potential strengths and traits of both quantitative and qualitative research methods to be utilised in a single study. Some have gone further to suggest that MMR may "provide the best opportunity" for a research problem to be addressed (Scott & Morrison, 2006, p. 154). More specifically due to the ability to gain the breadth of data possible when using quantitative methods adjacent to the vigour of investigation enabled by the use of qualitative research methods (Gay et al., 2009).

A potential disadvantage of using MMR is that it can be a time consuming process requiring increased resources when compared to the use of quantitative or qualitative research paradigms alone (Gay et al., 2009; Gorard, 2010). The use of MMR also requires the researcher to undergo adequate training (in order for research to be conducted), and to gain experience, in both quantitative and qualitative paradigms (Scott & Morrison, 2006). The researcher's decision to use MMR was endorsed by the potential benefits of gaining a deeper and more holistic understanding of the research phenomena and a more comprehensive set of data. In light of this the researcher spent considerable time and effort handling the quantitative data and on their personal skills as a qualitative researcher in order to operate efficiently within the MMR paradigm.

In the current study quantitative questionnaires were implemented with a larger number of participants followed by one-on-one qualitative interviews conducted with a smaller sample size. This approach allowed the qualitative results to add deeper clarification to the numeric data which was sourced through the quantitative research measures. Quantitative and qualitative methods possess varying aims and, as previously mentioned, encompass individual strengths (Gay et al., 2009) and weaknesses. These aspects are investigated in more detail throughout this chapter.

Quantitative Research.

The paradigm of quantitative research has been defined as 'the collection and analysis of numerical data to explain, predict, and/or control phenomena of interest' (Gay et al., 2009, p. 28). Mathematical methods and numerical accounts are key components of quantitative research (Niglas, 2010). Through the quantitative paradigm the world is believed to be measurable (Gay et al., 2009; Niglas, 2010), explainable, relatively stable and somewhat predictable (Gay et al., 2009). Furthermore, quantitative research has been explained as having the ability to be generalised, standardised and as being objective (Niglas, 2010). The tools which are used in order for quantitative data to be generated commonly require very little interaction between the researcher and research participants. Indicative of this lack of interaction are the research tools implemented in quantitative research which are often completed using pen and paper (Gay et al., 2009).

In consideration of the limited interaction of quantitative research it is possible, and increasingly practical, that research occurs with a large sample size. It is large sample sizes which have been suggested to allow meaningful statistical information to be obtained in quantitative research (Gay et al., 2009).

Qualitative Research.

Qualitative research has been an emerging approach in the last 30 years which, in contrast to quantitative research, does not consider the world as being consistent, reasoned or invariable (Gay et al., 2009). Comparatively, qualitative data recognises the world as being open, subjective and detailed (Niglas, 2010) and believes there are many varying ways in which in the world may be perceived (Gay et al., 2009). Qualitative research endeavours to represent the perspectives and views of the people involved in the environment in question (Yin, 2011) and describe the meanings of such (Bogdan & Biklen, 2007).

In order for phenomena to be understood as they occur naturally and for research results to have increased relevance; qualitative research takes a naturalistic view and occurs within natural settings, from the participants' point of view (Gay et al., 2009). Qualitative research is likely to occur directly through interactions made between the researcher and participants (Gay et al., 2009). Perhaps due to the depth of information and time consuming nature of collecting qualitative data it is more realistic and practical that small sample sizes are used.

In highlighting the aims, strengths and weaknesses of both qualitative and quantitative research, justification for the researcher's decision to utilise a mixed methodology has been made. By gaining numerical data through use of the questionnaires it was possible for these findings to be added to the increased depth of information gained through the implementation of a concentrated number of qualitative one-on-one interviews.

Credibility and trustworthiness.

In order for the findings to have increased credibility and trustworthiness a number of steps have been taken. Increased credibility, or the believability of a study (Mutch, 2005), was attempted through a continuous evaluation of themes which emerged throughout the data analysis process. While attempts had been made, prior to the study, to review literature surrounding areas which were anticipated to arise throughout the data analysis process; new and unexpected themes also emerged. A review of additional literature therefore occurred in order to investigate these emerging themes.

Additional attempts to increase the credibility of this study were made through efforts to capture and explain results which could be considered somewhat complicated and difficult to articulate (Gay et al., 2009). These difficulties may have been due to the age of participants (11-12 years) and their resulting identification with generations differing to that of the researcher. To deal with any potential misunderstandings due to this generational difference an investigation of literature by Mertens (2005) became particularly relevant. Mertens (2005) identified a concept labelled 'back translation' (p. 183) which is a concept indicating the reliance on, and collaboration with, another who has experience in using the language in question. While the language spoken by the researcher and the participants was not different, the dissimilar understanding of slang between the two parties presented a noteworthy challenge. Through the use of back translation, however, the linguistic differences which existed were queried and clarified with another who had frequent exposure to discussion with 11 and 12 year olds in order to enhance the researcher's understanding of interview responses.

Measures taken in order to overcome any challenges to the researcher's perception of data included the use of observer comments and memos throughout the processes of data collection and data analysis. Use of these measures enabled the researcher to better recreate the context and tone of conversation when required throughout the data analysis process. Supplementary to this, the researcher informally made efforts to participate in discussion with youth of the same age group as

participants when opportunities to do so arose (through acquaintances or during personal coaching opportunities). This approach was taken to enable the researcher to have a greater understanding of qualitative data as they had been immersed more fully into the language and nuances used by individuals of the same age as participants in this study.

Another step which was taken to enhance the credibility and trustworthiness of this research was the incorporation of interview questions which required participants to answer through use of a numeric scale (see Appendix B). A zero to 10 scale was implemented (zero representing the least, 10 representing the most) as this was considered a familiar term of reference for participants. This familiarity was intended to enhance participants' comprehension, and therefore validity, of their responses. It was the researcher's intention that this approach would allow participants to express their responses numerically alongside those explained via conversation. By doing so it was believed that individuals who provided less in the way of dialect in their question responses would be offered additional avenues through which question responses could be made. In terms of validity this approach was an effective checking measure to assess if the researcher's interpretations of participant responses were in fact recognised with the same meaning or importance which participants were attempting to convey.

Respondent validation (or 'member checking', Bui, 2009, p. 185) was also used in order to increase credibility and validity in the study and to ensure it measured what it indicated it would measure (Mutch, 2005). Moreover, member checking was performed to ensure that interview data accurately captured participants' opinions, views and beliefs (Scott & Morrison, 2006) and that the data provided undistorted and clear accounts of what participants aimed to convey. According to Mertens (2005) member checks are the most important criterion with regard to establishing credibility in a study. Interview transcripts were made available to participants (and their parents/guardians) for review prior to their inclusion in the data analysis process (Gay et al., 2009). No participants requested to review their interview transcripts in this study.

An additional attempt to increase validity in the current study was to check for internal validity. Internal validation is a measure of whether or not a study, and its findings, matches the reality of the situation (Scott & Morrison, 2006). Internal validation was used to ensure greater quality control in the processes of data analysis. Internal validity was increased through independent analysis being conducted on data by the researcher and an experienced coach educator before discussion and justifications the identified themes and patterns were shared.

Another, and perhaps the most fundamental, attempt made to increase this study's validity and trustworthiness was the implementation of triangulation (Mutch, 2005). Triangulation has been suggested as the primary way in which a study's validity and trustworthiness can be enhanced by researchers (Gay et al., 2009). Details of triangulation will be discussed in the following section.

Triangulation.

Triangulation has been described as the process of using two or more methods in order to collect data (Burns, 2000). The use of triangulation discovers connections and intersections between data and may confirm what has been found in various data sources (Bui, 2009). It is believed that triangulation may provide a more complete picture of a research phenomenon and add a deeper, richer and more holistic understanding of a study's results (Bui, 2009). The strength of a study has been suggested to increase when information is collected through a variety of research methods (Gay et al., 2009). This is not only due to the ability to rely on more than one source of information but also as the potential weaknesses of one data collection method may be compensated by the use of additional research methods. Figure 5 shows a visual representation of the process of triangulation when using both quantitative and qualitative research.

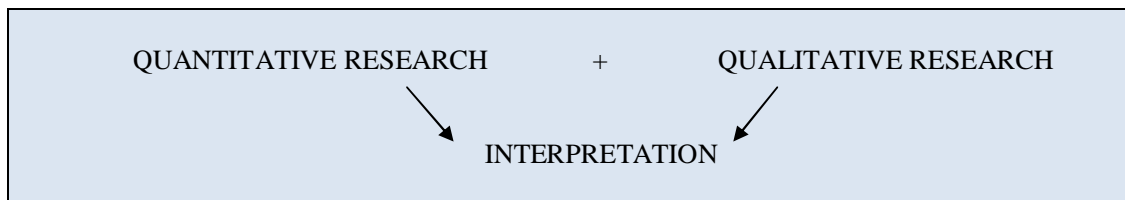


Figure 5: Triangulation mixed method design (source: Gay, Mills & Airasian, 2009, p. 466).

Methods

Pilot studies.

Following ethical approval from the University of Canterbury Human Ethics Committee (Appendix C) and prior to the commencement of data collection with research participants; pilot studies of quantitative questionnaires and qualitative interviews were conducted. Details surrounding the purpose and process of the use of pilot studies are outlined in this section.

The use of pilot studies has been considered essential for several important reasons. Pilot studies enable the opportunity for the suitability of RQs to be rehearsed and evaluated (Gay et al., 2009; Yin, 2011), for the language proposed for use to be assessed in relation to its suitability with specific populations (Gay et al., 2009) and for a researchers' interviewing techniques to be practiced (Thomas & Nelson, 2001), evaluated and developed (Mutch, 2005). Pilot studies may also assess if participants comprehended the questions asked and enhance the validity of the study by identifying if the questions used measured what they had intended to measure (Mutch, 2005).

In previous research (see Eys et al., 2009a) attempts have been made to obtain data which was considered both trustworthy and relevant by ensuring the language incorporated within the tools of data collection appeared genuine and was comprehended by the study's participants. The use of pilot studies in this study also served as an opportunity for the researcher to assess the effectiveness of proposed language when used with 11-12 year olds prior to final data collection.

For the pilot studies to be as effective as possible, efforts were made to ensure they were conducted in settings and contexts as close to that of final data collection as possible (Burns, 2000) and with participants who possessed similar characteristics to those who would meet final participation criteria (Gay et al., 2009). To ensure consistency between pilot studies and final data collection pilot study participants were 11-12 years of age, were either male or female and had over two years involvement in netball, V-ball or both games. An explanation of the study was provided, information and consent forms (approved by the Human Ethics Committee) were used in interview

situations and participants' parents/guardians were able to be present. Data collection followed a consistent pattern with each participant; questionnaires were completed and followed by a one-on-one interview. Interviews were recorded using an audio recorder (with participant assent and parental/guardian consent) and conducted in a structured and formal manner, following the procedures outlined for use during data collection. One significant variance between final data collection and pilot studies occurred with regard to post interview data handling. The interview recordings of pilot study interviews were not transcribed; instead the recordings were used as a tool for researcher reflection and evaluation.

A total of four participants were used in the pilot study as recommended by Gay et al. (2009). A sample of this size allowed any issues in the data collection process to be identified, whilst participants' varied personalities and experiences required differing interviewing skills to be utilised. It was these factors which ultimately contributed to the researcher's confidence and experience in data collection.

Review of the pilot study process and data which was collected informed this study's design. Administration of the questionnaire in pilot studies, required 20 to 25 minutes to complete and none of the four participants requested further clarification of item wording. Furthermore, the length of each interview in the pilot study was 25 to 35 minutes in duration. An interesting observation made through the process of pilot testing, was that some of the participants were content to converse with the researcher for long durations and in considerable depth on a number of issues however others needed suitable prompts in order for conversation to occur and to enable the researcher to obtain a clearer understanding of participant perspectives. On review of the pilot studies (including both questionnaires and interviews) and in conjunction with evaluation of the interview audio recordings, the researcher was able to gain considerable insight. Initially, the unpredictability of participant responses was highlighted however, as noted in previous research, importance was placed on the researcher's neutrality so as not to appear judgemental (Thomas & Nelson, 2001) and to avoid any potential discouragement to participants in answering the interview questions truthfully (Davidson & Tollich, 2003).

Noteworthy outcomes of the pilot studies (interviews) were the researcher's increased awareness of the ratio of researcher-to-participant conversation and the worth of reducing the researcher's verbalisation whilst increasing the amount of listening which occurred to individual's responses (Gay et al., 2009). This was supported by Davidson and Tollich (2003, p. 245) who indicated that rather than the interviewer conversing at an increased capacity to that of the respondent, it was the objective of the researcher to 'facilitate respondents' descriptions and reflections on their experiences.

The researcher considered the implementation of pilot studies as a very worthwhile tool with regard to skill development and evaluation, especially on reflection of the effectiveness of utilising prompts and wait time techniques. The use of pilot studies was therefore a catalyst for further investigation into ways in which interviewing approaches could be improved. In order to discuss these aspects, as specific to this study, the following section will describe the research setting and the researcher's positioning within this.

Research setting.

In 2011, the WNC held their annual winter netball competition which was estimated to have 380, 11-12 year old participants. WNC have also held an annual V-ball Challenge which has commonly been participated in by school teams; many of whom were likely to have had school workshops delivered to them throughout the year. There were an estimated 80, 11-12 year old participants in the 2011 V-ball Challenge at WNC, however as many as 680 youth have been estimated to have participated in V-ball in the Whangarei region via workshops, school initiatives and additional WNC projects throughout 2011 (Cresswell, 2011).

Due to the participation rates of both netball and V-ball at the WNC this was chosen as the most suitable location for data collection. Data collection occurred in two phases; firstly in the form of questionnaires and secondly through the use of one-on-one interviews. The completion of questionnaires occurred at the various training or game venues of participating teams. It was requested that coaches aimed to find a warm and comfortable environment for participants when

completing questionnaires such as inside a classroom or clubroom (in the instance of poor weather) or on seating in an area with minimal distractions. The second phase of data collection was the qualitative interviews, each of which was conducted inside the WNC building itself, in a space conducive to interviewing which comfortably provided enough space for the researcher, the participant and their parent/guardian. Access to the building, as well as access to the contact information of team coaches in the region, was made possible through previous contact made with WNC staff and through further discussions where physical access to the centre was arranged at times suitable to participants and their parents/guardians.

Researcher positioning.

The researcher's position was that of an outsider to the research setting in this study (Mertens, 2005). This was due to the fact that the researcher had no part in the sports organisation who assisted with providing participant contact details, had no previous links with the venue where data collection occurred and had no previous contact with any of the research participants, coaches or parents/guardians involved in the research setting. The researcher was therefore unfamiliar to all aspects of the research setting and participants of this study.

An advantage of this positioning has been indicated to be the existence of potentially increased perceptions of participant safety when the researcher (the interviewer) is considered a stranger (Mertens, 2005). As consistent with literature, the unfamiliarity of the researcher appeared to be conducive to the increased comfort and feelings of safety which participants indicated when providing information. While, to participants, this researcher was a stranger it was hoped they would be perceived as someone who genuinely wanted to get to know them and was interested in what they had to say (Mertens, 2005).

The researcher had expected their unfamiliarity to have been a potential barrier to the comfort which participants experienced throughout the interview process. This unfamiliarity may have affected the amount of conversation participants were willing to partake in and the depth of their question responses. Surprisingly, this was found not to be the case for majority of participants. This

was perhaps due to the efforts made by the researcher in the design of the interview schedule (Appendix B). From the initial introduction between the researcher and the participant, followed by the first of the interview questions, it was the researcher's aim that rapport would be developed. The initial interview questions were also implemented in order for the participant to gain a better understanding of how the interview process would occur (for example question, response, question and so on) and that they were welcome to say as much (or as little) as they liked on a topic. It was hoped at this point that participants would realise that the responses they gave would be listened to by the researcher and that each comment was perceived as worthwhile and appreciated. While some interview participants required suitable prompts throughout the interview it surprised the researcher as to how quickly majority of the participants appeared comfortable to speak with the researcher in large quantities and to include information which may have only been provided in instances where a sense of trust existed.

The researcher also attempted to make their role in the research, as well as the process of data collection, clear to all participants and their parents/guardians. In aims of doing so the details of the study were presented via information forms and the assent and consent forms which were distributed to participants, and their parents/guardians, prior to engagement in the study (Appendices D, E, F, H & I). It was also indicated that the researcher would wear a name badge when at the courts for ease of identification. The purpose and aims of the study, as well as the role of the researcher, were also provided verbally to the participant and their parent/guardian, prior to the commencement of qualitative interviews. Furthermore, throughout the interviews additional opportunities were provided to the participant and their parent/guardian for any questions to be asked of the researcher.

This section has provided information on the research setting as well as on the researcher's position within this. The section which follows will discuss the participant selection process including the steps taken to gain access to the research setting, to make contact with team coaches and research participants and to obtain parental/guardian consent and participant assent prior to final data collection.

Participants

Two data collection tools were used; quantitative questionnaires and qualitative interviews. In the quantitative questionnaire participant perceptions of self-satisfaction and team cohesion were investigated in male and female players; netball only players (N= 28, mean age= 11.75 years), V-ball players (N= 8, mean age= 12.38 years) and participants of both netball and V-ball (N= 27, mean age= 11.93 years). This information is presented in Table 3. In this phase of the study netball only participants had between one and six years playing experience (mean playing experience= 3.96 years), V-ball only participants had between one and five years playing experience (V-ball mean playing experience= 2.25 years), netball & V-ball participants had between one and five years playing experience (netball & V-ball experience; netball= 2.52 years, V-ball= 2.11 years).

Table 3: Questionnaire participants' mean playing experience and age.

Group	Participants (N)	Mean experience (yrs)	Mean age (yrs)
netball only	28	3.96	11.75
V-ball only	8	2.25	12.38
netball/ V-ball	27	2.52/2.11	11.93

In qualitative interviews (N= 12) participant perceptions of self-satisfaction and team cohesion were investigated in male and female players; netball only (N= 2, mean age= 11.5 years), V-ball only (N= 2, mean age= 11.5 years) or netball and V-ball (N= 8, mean age= 11.75 years). As seen in Table 4, netball only participants had between six and seven years playing experience (mean experience= 6.5 years) and V-ball only participants had between two and three years playing experience (mean experience= 3 years). Netball and V-ball participants had between one and six years playing experience in netball (netball mean experience= 6.5 years) and between one and five years playing experience in V-ball (V-ball mean experience= 2.12 years).

Table 4: Interview participants' mean playing experience and age.

Group	Participants (N)	Mean experience (yrs)	Mean age (yrs)
netball only	2	6.5	11.5
V-ball only	2	3	11.5
netball/V-ball	8	6.5/2.12	11.75

Participant recruitment for this study followed a process of purposive sampling (Mutch, 2005; Yin, 2011) where participants did not represent a majority population of their peers. Instead they met the criteria for participation in the study and were selected due to their ability to generate relevant and ample data (Burns, 2000). Figure 6 presents a diagrammatical explanation of the process of purposive sampling and participation criteria.

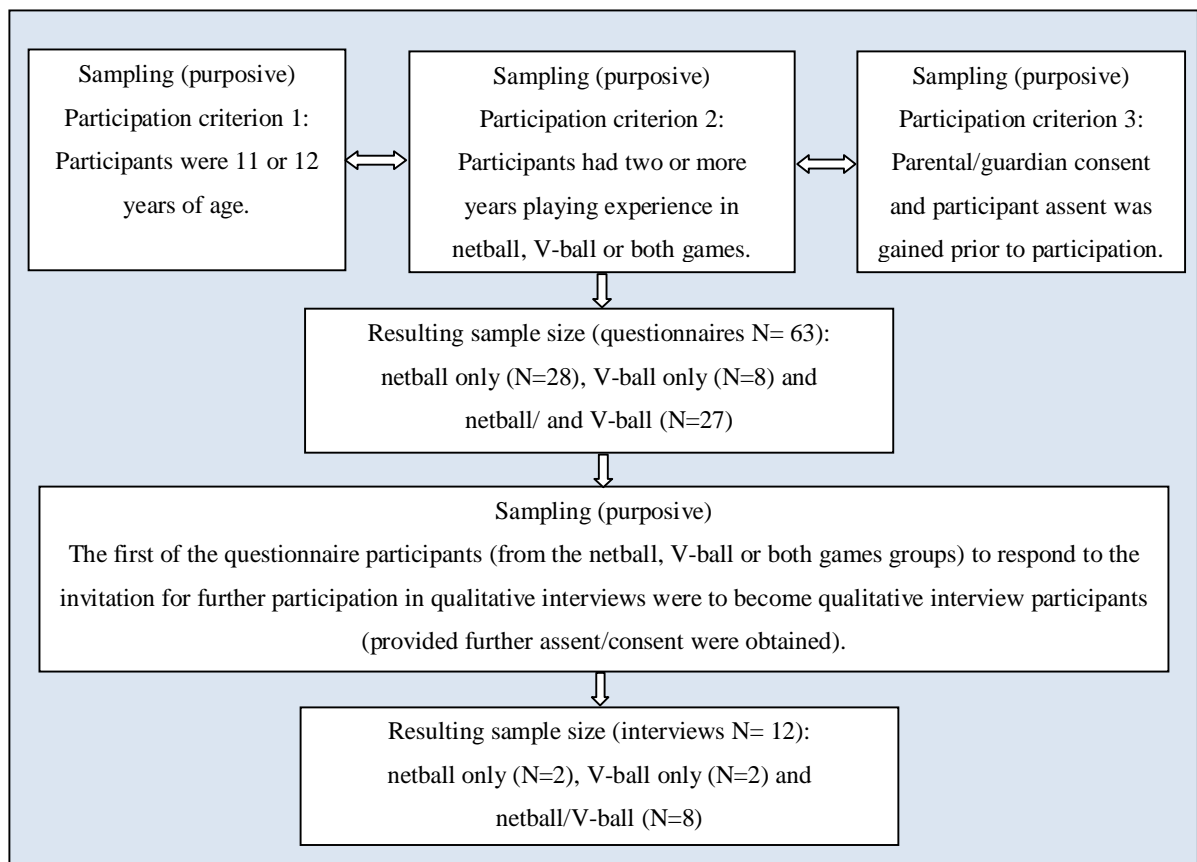


Figure 6: Process of participant sampling and participation criteria.

The following section describes the process of data collection.

The data collection process

STEP ONE: Initial contact was made by the researcher to development personnel at the WNC via email. Upon response, further contact was made via phone call in order to establish an understanding of the research project and to investigate the interest of WNC to assist with the study.

STEP TWO: With contact information supplied by WNC personnel (following step one) further phone contact was made between the researcher and the specific WNC V-ball development personnel. The aim of this contact was to discuss the research project, to gain an understanding of this individual's interest to assist with the study and to obtain further information in order to conduct the following steps.

STEP THREE: On agreeing to assist with this study a list of possible team coaches/teams whose members were likely to meet the research criteria was compiled by WNC personnel. Initially coaches of such teams were contacted by the WNC development personnel who discussed the research details of this study with them, as gained through communication with the researcher. The WNC personnel were then able to gauge the willingness of coaches to be included in the study and relayed this information to the researcher.

STEP FOUR: Coaches who expressed an interest were then introduced to the researcher by WNC personnel. In instances where introductions were not possible coaches were contacted via email. Further discussion surrounding purposive sampling and the participation criteria then took place.

STEP FIVE: The coach then contacted their team members who met the research criteria in order to provide them with information regarding the study and to determine their willingness to participate. Team coaches were asked to conduct this aspect of participant recruitment as a means

to decrease any potential coercion which individuals may have perceived had this step been performed by the researcher.

STEP SIX: Team members who met the sample requirements and expressed an interest to participate in the questionnaire were then supplied with the necessary participant assent and parental/guardian information and consent forms (Appendices D, E & F) by the coach, as supplied by the researcher. Upon completion and return of these forms coaches provided the participants with a pen/pencil and individual copy of the questionnaire (see Appendix G) to complete (which the researcher has provided to the coach). The researcher requested that questionnaires be completed prior to the commencement of the training or game in order to avoid any potentially salient or unusual events, which may have occurred during the activity, to dictate individuals' questionnaire responses. The questionnaires took around 20 minutes for participants to complete and were filled out either on courtside seating or inside the WNC building.

STEP SEVEN: Upon completion of the questionnaire, players who indicated their interest for further research participation in a one-on-one qualitative interview, were provided with the relevant information and participant assent and parental/guardian consent documentation (Appendices H & I). The final interview participants were identified only once the necessary documentation had been completed and were returned to the researcher.

STEP EIGHT: The first two respondents from the netball only (N=2) and V-ball only (N=2) groups, and the first eight participants from netball and V-ball group (N=8) who provided completed consent and assent forms were the final interview participants. These participants were recruited regardless of additional factors such as gender or ethnicity.

STEP NINE: Once the final twelve (total) interview participants were identified the interviews were arranged to be held at the WNC at a time and date of convenience for individual participants and their parent/guardian.

STEP TEN: All interviews were conducted in the WNC building which provided a warm environment with comfortable chairs and a room which was conducive to audio recording. A benefit of using this setting is that it was a familiar environment to both the participant and their parent/guardian. Access to the venue was assisted by WNC personnel who ensured that the room was available at the most convenient to the participant and their parent/guardian. As indicated in the information sheets a parent/guardian of each participant was invited to attend interview however of the twelve interview participants, only two parents/guardians chose to be present.

The following section will describe the details of the quantitative and qualitative data collection tools.

Tools of data collection

Questionnaires.

Quantitative questionnaires were used as a data collection tool in this mixed methods study. Questionnaires are a written set of questions to be answered by individuals who meet the criteria for participation in a specific study (Gay et al., 2009). The information which questionnaires aim to obtain surround relevant conditions and practices involved in a research setting or the participants' knowledge or opinions on a topic (Thomas & Nelson, 2001). Individual interaction between researchers and participants in quantitative research is generally limited (Gay et al., 2009). The use of questionnaires as a research tool enabled the involvement of a larger number of participants resulting in a more comprehensive set of data being obtained. Additional advantages of using questionnaires have been identified as their low cost to implement, their ability to maintain participant confidentiality and the standardisation of the questionnaire itself meaning that each participant receives the same questions, framed in exactly the same way (Burns, 2000; Gay et al., 2009). Furthermore, the use of questionnaires has been suggested to enable participants to answer questions in their own time and at their own pace (Burns, 2000).

A suggested disadvantage of questionnaires however is that the researcher is unable to probe or follow up on participant answers if additional information is required (Burns, 2000; Gay et al., 2009). Furthermore, participants are not provided the freedom to answer questions in their own words (Burns, 2000).

Questionnaire design.

This study's questionnaire was designed to investigate two factors; 1) BPNS and 2) task and social cohesion. The inclusion of these factors was based on previous research by Baard et al. (2004) and Eys et al. (2009a) respectively.

The Basic Psychological Needs Scale (Baard et al., 2004) has been used to examine the differences in the antecedents of intrinsic motivation. The sub dimensions of this scale broke down into competence, autonomy and relatedness; the three psychological needs previously identified in the SDT to drive individuals' intrinsic motivation (Deci & Ryan, 2000).

The YSEQ (Eys et al., 2009a) was used to examine cohesion related variables with a view to understanding the effect of V-ball on the likability of the tasks and individuals involved in participants' game experiences. The principle dependent variables in this aspect of the questionnaire were task and social orientations of cohesion.

Both of these questionnaires were modified for sport (netball or V-ball) and age (11-12 years) related wording. Furthermore, Eys et al. (2009a) used a seven point scaling system in their measurement however as this questionnaire was designed with reference to two inventories, the scaling system was modified to a five point scale (Appendix G). In doing so it was believed that these measures would be more effectively understood by 11-12 year old participants and would allow them to make clearer distinctions between response options. It was expected that the use of a five point scale would result in a greater level of response validity. Additionally, as consistent with the YSEQ (Eys et al., 2009a), two spuriously worded questions were included in the questionnaire in order to address issues of item wording or response acquiescence.

As consistent with the work of Everhart and Fiese (2009), which incorporated the use of a pictorial scale with youth participants, the measurement used pictorial responses of variously weighted seesaws where the five point scale was implemented. The use of a pictorial reference in this questionnaire allowed the youth participants to align their numerical question responses to a visual scaling system to assist them in answering the questionnaire.

The use of pictorial references in research with youth has been endorsed by Harter and Pike (1984) who indicated that prior to eight years of age individuals may experience varying conceptual judgements of psychometric measures. Others have suggested that after 10 years of age children have an increased cognitive ability to judge emotions and events accurately (Drotar, 2004) however when compared to questions requiring written answer formats Kamphaus and Frick (2005) have suggested pictorial references may be increasingly understood by youth participants. Further support exists for the use of pictorial references as they have been indicated to produce more reliable results due to the fact that they may enhance the attention which youths are able to hold and may be increasingly understood by participants of this age (Harter & Pike, 1984). In support of these suggestions Everhart and Fiese (2009) indicated that the use of pictorial formats work to anchor youths' perceptions and therefore are developmentally appropriate for these participants.

This study's questionnaire has been checked for content validity by a panel of two senior coach educators where suitable adjustments were made. Minor adjustments were also made following the pilot testing process. As a part of the mixed methodology, and in the aim of conducting research which was able to generate the most comprehensive set of data possible alongside the implementation of quantitative questionnaires, qualitative interviews were conducted as explained in the following section.

Interviews.

In order to add increased depth and clarity to the quantitative findings, semi-structured one-on-one interviews were implemented. Strengths of the qualitative interview approach are that they allow the researcher to rephrase any questions which a participant may not have understood. Furthermore

the researcher is able to probe or investigate question responses further should additional data, explanation or clarification be required (Burns, 2000; Gay et al., 2009; Thomas & Nelson, 2001).

Additional benefits of the use of qualitative interviews include the ability for greater trust and rapport to be built between the researcher and a participant (Burns, 2000; Denzin & Lincoln, 2011), the ability of researchers to observe non-verbal types of communication (Burns, 2000), the ability for an interview to be audio-recorded (with consent) for transcription and further analysis (Gay et al., 2009) and for the participant to answer interview questions using their own frame of reference⁸ (Bogdan & Biklen, 2007, p. 3). With specific relevance to the current study, the use of qualitative interviews which allow participants to answer questions freely and verbally may be of benefit to youth who may have found providing information in a written form to be challenging (Burns, 2000). In this instance increased validity in the findings of a study may be a likely outcome of the use of interviews in data collection, and may also add depth and clarity to the data obtained from quantitative measures.

Suggestions have been made that the use of interviewing in data collection is time consuming in nature and requires the interviewer to have well practiced interviewing skills (Burns, 2000; Gay et al., 2009). The occurrence of these aspects could be considered a weakness in the use of this tool, however, given the depth and nature of data which had the potential to be collected through the use of qualitative interviews, the researcher believed the time invested in practicing, preparation and conducting of interviews would be time well spent. A part of this practice and preparation was the implementation of pilot studies as also used with this studies quantitative questionnaire. Similar to the duration of pilot tests each of the interviews held in final data collection lasted for durations between 25 and 45 minutes each.

⁸ An individual's frame of reference can also be considered as the structure of their views or values through which their ideas are communicated and perceptions are made (Bogdan & Biklen, 2007).

Interview design.

This study incorporated the use of a qualitative semi-structured interview schedule (Appendix B). Semi-structured interviews have been explained as a set of questions which guide the interview while flexibility exists for changes to be made throughout the interview process (Mutch, 2005). All interviews were audio recorded with permission from the participant and their parent/guardian. The use of an audio recorder in studies using interviews as a tool of data collection has been recommended (Bogdan & Biklen, 2007) as it allows the researcher freedom to take part in more natural dialogue with the participant, as opposed to the occurrence of disjointed conversation if notes are taken throughout the interview. The use of an audio recorder has also been suggested to increase the likelihood of a more comfortable environment being created and to have the potential to put the participant, and their parent/guardian, at ease (Burns, 2000). The creation of such an environment may increase the rapport experienced between the participant and the researcher and also increase the comfort perceived by participants to communicate their thoughts and opinions more openly.

Prior to the beginning of each interview the recording device was placed on a nearby desk, in full sight of all involved. At this point participants were assured that the use of the resulting interview recording would be for data collection and analysis purposes only and would be considered as data collection material and therefore considered a confidential document and stored securely. As noted in the pilot interview process, participant's curiosity with the audio recording device had been somewhat of a distraction to the interview process. In order to avoid the occurrence of a similar distraction during the interviews used for final data collection the researcher ensured the purpose and function of the audio recorder was well explained to participants prior to the commencement of the interview. The researcher also ensured, well prior to the interview process, that the mechanics and capabilities of the audio recorder were personally well understood (as suggested by Bogdan & Biklen, 2007; Yin, 2011). This was done in order to minimise any disruptions both during the interview process and when referring to interview recordings during the transcribing process. A further measure to limit any potential distractions in the data collection process, the audio recording

was securely saved and transcribed verbatim by the researcher as soon as possible following the completion of each interview.

The interview questions were constructed as open-ended questions which allowed participants to communicate their thoughts liberally, using their own 'frame of reference' (Bogdan & Biklen, 2007, p.3). The open-ended question design aimed to decrease any limitations perceived by participants regarding their options for response (Davidson & Tollich, 2003). The use of open-ended questions also provided opportunities for individuals to focus on their own perceptions and experiences (Burns, 2000) and to expand on the information they were providing (Thomas & Nelson, 2001). Open-ended interviewing has also been suggested to result in an increased range of data (Denzin & Lincoln, 2011) when compared to other methods of data collection.

The interview schedule was based on questions of three kinds; introductory questions, theme questions and prompts (Davidson & Tollich, 2003). Introductory questions were implemented as a conversational prelude and aimed to assist both the researcher and the participant to build rapport, especially in the instance of this research where both parties were unfamiliar to one another (Bogdan & Biklen, 2007). Additionally, the researcher engaged in casual conversation with the participant as a means to put them at ease and create a non-threatening environment from the initial moments of the interview. This initial conversation also aimed to allow participants to begin talking freely about their own experiences and opinions (Davidson & Tollich, 2003). The topics of conversation during the initial stage of the interview surrounded the participants' schooling and hobbies outside of netball or V-ball, as well as their playing experience and first memories of their sport. It was during this time that the researcher took the opportunity to thank the player (and their parent/guardian) for making themselves available for the interview.

The aspect of the interview structure which followed this initial conversation surrounded the theme questions which were core to this study's RQs. The third type of question incorporated the use of prompts and spontaneous questions in an aim to seek additional information through expanding on the answers already provided by participants. Prompts were also used to clarify what the participant

was attempting to explain in one or more of their answers (Davidson & Tollich, 2003). As previously explained, another measure taken to increase the clarity of participant responses was to formulate interview questions utilising a zero to 10 numeric scale.

It was of importance during this study that the interview process was regulated between each participant. A result of this measure meant that any variations in question responses could be attributed to the individual and any outcomes of researcher bias could be avoided (Mertens, 2005). In light of this, particular consideration was made to the way in which interview questions were asked, the probes used following initial participant responses, the handling of interpersonal aspects within interviews and the way in which both the researcher and the study were presented and introduced to the participant (Mertens, 2005).

At the conclusion of each interview the participant, and their parent/guardian, were thanked again for their involvement. Participants were also reminded that they had the opportunity to review a transcribed copy of their interview once prepared to ensure the result was an accurate and true representation of what had been said during the interview and to assess if any editing or corrections were required. None of the 12 interview participants, or their parents/guardians, accepted the offer to obtain a copy of their interview transcript for review.

Ethical considerations.

This study was granted ethical approval by the University of Canterbury Human Ethics Committee (Appendix C). Participants were required to give their assent to be involved in any aspect the data collection process and for the resulting data to be included in the data analysis and final results of this study. Due to the fact that the participants were 11 or 12 years of age consent from a parent/guardian of each participant was required prior to their involvement in any aspect of data collection. In an attempt to ensure researcher deception was avoided the information sheets (provided prior to data collection) provided essential information on relevant aspects of the data analysis process and explained the researcher's intentions for presentation of the final results (Mutch, 2005). From initial contact and throughout the research process participants and their

parents/guardians were provided with opportunities to discuss any queries they may have had about the study with the researcher. As previously mentioned the parents/guardians of interview participants were informed (at the point of consent) that they were more than welcome to attend the interview. In doing so the parent/guardian was made aware that they would be able to speak to the interview participant however only information which was expressed by the participant would be included in included in data collection.

Consent was also provided by the WNC for data collection to occur at that location and for WNC staff to assist with initial coach contact and further participant recruitment. The WNC were also contacted in order to obtain written consent for their name and participation rates to be included within this thesis. This written consent is presented in Appendix J.

Additionally, participant coercion was avoided throughout all phases of research. An example of this occurred through the process of participant recruitment. Rather than the researcher making direct contact with individuals regarding participation in the study, it was the team coach who initially communicated research information. The coach also gained expressions of interest from their players and distributed the questionnaires. The researcher chose this approach as they believed their presence may have installed perceptions of pressure or coercion on team members to participate. The use of the team coach in such a role however was anticipated to offer a more familiar, non-influencing and therefore less coercive environment for individuals to make their own decisions regarding participation in the study comfortably, without feeling pressured to do so.

Furthermore, individuals were provided further assurance (both verbally and written) that there was no pressure to participate in the study and that they would not be treated any differently if they did or did not choose to be involved. Participants were also informed that if at any time they wished to no longer be involved in the study they would be able to withdraw without consequence. This information was verbally repeated by the researcher to interview participants (and their parent/guardian). It was indicated to these individuals that even after the interview had been conducted, and audio recordings transcribed, a participant could chose to withdraw at any time. In

doing so participants were informed that both questionnaire and interview data which had been obtained from them would not be included in the study. There were no instances of participant withdrawal from questionnaires or interviews in this study.

Once both the questionnaire and interview data had been compiled and transcribed, analysis was able to begin, the following section will discuss this process.

Data analysis

Quantitative questionnaire analysis.

Once all completed questionnaires had been collected, data pertaining to each question was manually entered into a spread sheet. This data was inclusive of participants' demographic information. All entries were re-checked in order to avoid any potential errors in data entry. All scores were averaged for each of the psychological needs; competence, autonomy and relatedness and for each cohesion orientation; task cohesion and social cohesion. These scores were then used in the statistical analysis which followed.

Statistical decisions.

All statistical analysis was conducted using SPSS version 19.0 (IBM Corp, 2010). A one-way ANOVA was used to determine differences in the means of dependant variables across three groups. In all tests an alpha level of $p < .05$ indicated statistical significance. A multiple comparison test was run using Turkey's post-hoc test to determine differences between means. All questionnaire data were firstly analysed using the Kruskal-Wallis non-parametric test before subsequent analysis using the one-way ANOVA test. Results for the Kruskal-Wallis tests were equivalent, with regard to significance as those for the one-way ANOVA, so consequently the more powerful one-way ANOVA results are presented throughout. Where significant differences were found in the one-way ANOVA tests post-hoc testing using Tukey test were applied to the data to examine where significant differences occurred between the groups. As this study used a mixed

methodology, analysis also needed to occur with regard to the qualitative data collected. The following section discusses this study's qualitative data analysis.

Qualitative data analysis.

There have been various approaches suggested in the process of qualitative data analysis (see Bogdan & Biklen, 2007; Gay et al., 2009; Mutch, 2005; Yin, 2011). Due to the researcher's prior experience with, and familiarity of, the steps of data analysis outlined by Mutch (2005) and supported in literature (Bogdan & Biklen, 2007; Gay et al., 2009), similar processes were implemented in this analysis of data.

The following are the steps taken in the data analysis process, as outlined by Mutch (2005, pp. 132-133).

1. Browse

Once data from the 12 qualitative interviews had been successfully recorded and securely saved, each transcript was manually transcribed verbatim by the researcher. At this point interview participants were given a pseudonym as a measure of individual anonymity (Mutch, 2005) which they would be referred to as throughout this study. Each transcript was checked thoroughly a number of times to ensure that each were a true and correct representation of the content of each interview recording. Once the task of transcribing was complete the researcher took a short break from the interview data in order for a fresh and energised perspective to be experienced when re-approaching the research content (Bogdan & Biklen, 2007; Mutch, 2005).

2. Highlight

On re-approaching the interview transcripts each was carefully read at least two times in an undisturbed manner, as suggested by Bogdan and Biklen (2007). This step was taken to ensure the researcher's concentration and focus was maintained equally throughout the analysis of each transcript. When reading each transcript memos were made in order to highlight any noticeable

patterns or regularities, concepts or key words for reference during further analysis (Gay et al., 2009).

3. Code

This step has been referred to as the coding process (Mutch, 2005). Here actual sections or words from each interview transcript were identified and labelled according to their reoccurrence or perceived importance. As the transcripts had been created in a specific format (as derived from suggestions by Bogdan & Biklen, 2007) this coded information was recorded in the purposely vacant left hand column of the transcript document.

As a means of increasing the internal validity and credibility of this study's results an experienced coach educator was involved in the theming process. This educator independently followed the same coding process as outlined above with copies of each completed interview transcript.

4. Group and label

As suggested by Gay et al. (2009) the codes, which thus far had been recorded in a vacant left hand column, were made into typologies⁹ alongside other transcript excerpts with similar relevance. During this process it became clear that some typologies housed a multitude of well suited coded excerpts, however others were clearly less prominent due to the lack of support throughout the transcribed data. These typologies were reviewed numerous times for the suitability of the coded information to the group it had been placed within. The typologies were then given titles, if they had not clearly emerged already, which were noted on individual index cards.

5. Develop themes or categorise

At this stage index cards had been made independently by the researcher and also the coach educator. Each index card was headed by the title of coded typologies for a more controllable approach to the continued process of data analysis. Further notes/memos were made to the index

⁹ In qualitative research typologies are most commonly used to refer to categories through which subjects or concepts, relevant to the research phenomena, are organised.

cards (and identified themes) by the researcher in order to clarify the correspondence and suitability of the coded information with the emerging themes. This process highlighted the researcher's attention to areas where one or more codes may have intersected. The information included on the index cards was the emerging theme, the numeric information of participants (who had made reference to this theme) and the group to which these participants belonged (netball, V-ball or both games).

The index cards were then able to be placed down on a clear surface and moved around so as to investigate where any codes may have merged with or been linked to another, or where certain codes may have stood alone. It was here that initial investigation occurred regarding the emergence of any observable flow or structure of themes.

6. Check for consistency and resonance

As suggested by Mutch (2005) the researcher then referred to unmarked copies of the original interview transcripts to ascertain if the themes which had emerged throughout the coding process reiterated the researcher's interpretation of the interview content. It was here that the index cards of both the researcher and the coach educator were compared and discussed thoroughly in order to internally validate the themes which had emerged. In the occurrence of the researcher and coach educator's findings being incomparable or if similar themes were not identified then a third coach educator would have been recruited in order to assist in the validation process. The internal validation of themes by the researcher and the coach educator was successful however, the outcome of which adding strength and credibility to the themes identified.

7. Theme validation and member checking

As a further measure of ensuring credibility, trustworthiness and validity, a process of theme validation was incorporated through the use of member checking (Bui, 2009). In this process the lower order themes which had emerged through qualitative data analysis were presented to two netball and V-ball participants who were not included in the data collection process of this study.

These participants did however meet the same participation criteria as those in the current study, including age and participation experience (Biddle, Markland, Gilbourne, Chatzisarantis & Sparkes, 2011). Participants were provided a list of lower order themes and, using a numeric scale from zero (not important) to 10 (very important), were asked to indicate how much each theme was a part of their participation in either netball or V-ball. The results of this validation are presented in Chapter four: Findings.

Following the verification process the results of this study were pulled together that the researcher gained a clearer picture of the results as a whole. Here it became clear that there was a need for distinction to be made between higher order themes and lower order themes, this distinction contributed to their identification. In order to validate higher order and lower order themes the researcher discussed this with a critical friend with whom a level of agreement was reached. The original themes were from then on considered lower order themes, all of which were housed where relevant within one of three higher order themes. The higher and lower order themes are presented in the following chapter.

8. Select examples

On returning to the original interview transcripts again excerpts from the transcripts which had been identified in the previous steps of coding were selected for use in further discussion. Here the researcher made decisions regarding which of the participant comments were most representative of the research groups' perceptions of each of the lower order themes. These comments are presented in future chapters.

9. Report findings

As this was a mixed methods study both quantitative and qualitative findings are reported in Chapter Four: Findings.

Summary

This methodology chapter has defined, justified and discussed the mixed method approach to data collection and the use of quantitative questionnaires and qualitative interviews as data collection tools. This chapter has also explored the research design and explained the participant selection, the use of pilot studies, the research setting and ethical considerations made throughout this research. The process of data analysis and data interpretation used has also been explained. The following chapter presents the analysed findings of this data collection.

CHAPTER FOUR: FINDINGS

The aim of this study was to compare perceptions of self-satisfaction and team cohesion experienced by individuals (11-12 years of age) when playing netball, a modified netball game (V-ball) or both games. Within this chapter quantitative and qualitative data are presented in sections organised in response to the RQs. The statistical analysis of quantitative and qualitative data utilised was described in Chapter three: Methodology. In order to maintain confidentiality of participants, pseudonyms have been used.

RQ 1: What are players' perceptions of self-satisfaction in netball?

RQ 2: What are players' perceptions of self-satisfaction in V-ball?

Section one: Self-satisfaction

The results of quantitative data analysis, described in relation to RQ 1 and RQ 2, are depicted in Table 5. Two themes emerged from the qualitative data with regard to players' perceptions of self-satisfaction (see Figure 7 and Figure 8). The findings of theme one are presented, followed by those of theme two. Quantitative data are presented within these sections where appropriate. Further details of quantitative statistical analysis are presented in Appendix K.

Table 5: Means (\pm SD) for participants' basic psychological needs satisfaction (BPNS). *denotes significantly higher perceptions of autonomy in netball players when compared to that of V-ball players.

Group	Autonomy	Relatedness	Competence
Netball	3.80 (\pm 0.56)*	4.36 (\pm 0.56)	4.38 (\pm 0.60)
V-ball	3.2 (\pm 0.61)	3.76 (\pm 0.88)	3.65 (\pm 0.88)
Netball & V-ball	3.49 (\pm 0.61)	3.87 (\pm 0.68)	3.81 (\pm 0.77)

Theme one: Active participation.

In this section qualitative and quantitative evidence is presented from individuals of each playing group in response to RQ 1 and RQ 2. Figure 7 identifies Higher order theme one: Active participation and the contributing lower order themes. The predominance of each lower order theme in netball or V-ball is represented numerically as was identified by participants from the three groups; netball, V-ball and both games.

RQ 1/RQ 2		
HIGHER ORDER THEME: ACTIVE PARTICIPATION		
NETBALL	LOWER ORDER THEME	V-BALL
Lack of game speed netball= 1 netball & V-ball= 3	Speed	Presence of game speed V-ball= 2 netball & V-ball= 4
Not fun netball= 1	Fun (influenced by game play)	Presence of fun V-ball= 2 netball & V-ball= 6
Lack of playing time netball= 2 netball & V-ball= 2	Playing time	Satisfied with playing time V-ball= 1 netball & V-ball= 1
Negative netball= 2 netball & V-ball= 4	Positional rotation	Positive V-ball= 2 netball & V-ball= 8

Figure 7: Higher order theme one: Active participation and contributing lower order themes.

Speed. Qualitative findings show that netball participants believed the game possessed a stop/start characteristic, which was indicated as being responsible for the interrupted game flow experienced. This characteristic was included in participants' descriptions of netball's high structure which was suggested to negatively affect the speed of the game. Players explained that

netball rules, and the umpires who enforced them, contributed to the high structure of the game. These aspects were identified among players' least favourite things about netball:

The umpire like always blowing the whistle and you have to keep, like, stopping for that and standing down (Peppa, netball).

A number of participants identified the process of setting penalties following an infringement in netball as specific sources of frustration. In Netball, until a penalty pass or shot has been taken, the offending player must stand beside and away from the opposing team member in possession of the ball to allow the player to take the penalty pass, or shot, without being impeded in any way (NNZ, 2008c). As this rule has been modified in the creation of V-ball, Claire made a comparison:

You get pulled for contact and obstruction and you have to stand down. Like, but in V-ball you just have to move away (Claire, netball & V-ball).

In contrast to these findings, evidence shows that V-ball participants experienced freedom of movement and enhanced game flow. A comparison was provided by Olivia regarding the reasons for increased game speed in V-ball:

Without having to stop, like, there and you have to do this, it just gives you more freedom (Olivia, netball & V-ball).

Similarly, although without comparison being made, George explained the speed of the game among his favourite things about V-ball:

I love that you can run around and kind of be involved all over the place and not like have rules. Well like there are rules, but you can still just like go for it and try things if you want to and that and I love that it's fast (George, V-ball).

Furthermore, V-ball players indicated that increased game speed resulted in increased intensity of play, a result of which Sam described to enhance the fun and learning which occurred:

It's really fun and it, it teaches you, I think, about speed and about getting the ball down court as fast as you can. And um, yeah, it brings a level of intensity (Sam, netball & V-ball).

When discussing game speed it was evident that participants viewed netball to be highly structured, intermittent and frustrating. By comparison, V-ball participants identified the game as being less highly structured and, as a result, experienced increased active participation, speed and freedom of movement. The qualitative findings would indicate that perceptions of increased autonomy existed in V-ball however the results of quantitative analysis indicate that netball players perceived higher levels of autonomy satisfaction than V-ball players (see Table 5). Results of a one-way ANOVA indicated a significant difference between players' satisfaction of the basic psychological need of autonomy ($F_{(2,58)} = 3.835, p = 0.027$). Results of Tukey's post-hoc testing indicated that netball players' perceptions of autonomy were significantly higher than V-ball players ($p = 0.014$).

Fun (game play). No netball participants commented on the presence of fun in the game, one player did highlight its absence:

I like it and that but I'm not sure it's always like fun, fun you know? Like sometimes it's quite, like, I feel really like rushed a bit or like pressured and that so when I do maybe it's not so like enjoyed you know? (Peppa, netball).

Comparatively, V-ball participants provided evidence of fun being perceived in environments where pressure and seriousness did not exist. Furthermore, the intensity of V-ball was highlighted alongside the excitement of the game and satisfaction of individuals' need to experience relatedness. George explained:

It's just fun, like, it's not too serious but it's real exciting and I like playing with my friends and that too so it's fun. Oh and, like, I think it will get me real fit too (George, V-ball).

When asked why he had chosen to play V-ball again next season Sam explained:

It's just really fun (Sam, netball & V-ball).

The importance of participants' experiences of fun was made evident as, regardless of the sport, these perceptions were reflected in individuals' plans for continued involvement. Strong evidence for this finding has occurred in consideration of V-ball participants, all of whom expressed a unanimous desire for continued participation. More specifically eight of 10 V-ball participants linked their desire to participate in the future to the fun they experienced in the game.

Playing time. The amount of playing time participants received in netball or V-ball was found to be considerably different between the two sports. Netball participants expressed concern regarding the amount of playing time received. More specifically, both netball players and two players of both games identified their dissatisfaction with the playing time received in netball. In contrast to the previously identified quantitative findings on autonomy, netball participants provided examples which suggest this psychological need was surrendered in order to secure active game participation. Reference to the existence of a controlling coach environments in netball were also made with regard to the playing time received. Peppa explained:

we get told from our coach what we are gonna do that game and that and I guess that, like, if you don't do that then like you'll probably come off and, like, yeah so everyone like wants to play (Peppa, netball).

Furthermore netball participants explained that if they received more playing time their competence and confidence would improve. Aroha explained:

I didn't make a rep team this year but I don't get to play a lot. So, maybe if I got to play more I'd feel, like, better (Aroha, netball & V-ball).

In direct opposition to these findings were the perceptions of V-ball players, none of whom expressed concern over the game time received. Instead, Olivia explained her desire for more games to be held in which she could play:

I went away every game thinking 'oh man that was so cool' so that was awesome. Like I just wish there were more chances to play (Olivia, netball & V-ball).

As consistent with responses of other players with regard to V-ball, Olivia explained her desire for continued participation with excitement using increased pace of speech, emphasised facial expressions and exaggerated body language.

Positional rotation. As previously identified, the game modification of positional rotation has been implemented in V-ball. While the rules of netball do allow participants to rotate positions in specific scenarios it is important to note that this is not compulsory and is therefore subject to coach (or team) discretion. It was revealed that positional rotation was not utilised in netball for participants in the current study. Without the use of positional rotation it was found that some players occupied substitution roles for parts, if not all, of the game's duration. Furthermore, it has been identified that both netball participants and four of eight players of both sports identified their dislike of the idea of rotating positions in netball:

No, I don't really like it. Like I play shooting positions and they're real different to the others so I don't like the others (Peppa, netball).

Olivia, a player of both sports, explained the reason for her dislike of positional rotation in netball:

If like you're a defence player and like you can't shoot like, like I play defence and I would hate to be wing attack or something (Olivia, netball & V-ball).

By comparison evidence has shown that all V-ball participants viewed the implementation of positional rotation positively. This finding has contrasted to those identified in the quantitative analysis as, for some, the implementation of positional rotation increased individuals' perceptions of autonomy. When asked for her thoughts on the best thing about positional rotation, Alex responded:

I can go everywhere and do heaps (Alex, V-ball).

In addition to the factors which have been identified to contribute to the fun which individuals experienced in V-ball, positional rotation was found to have similar outcomes. Furthermore, positional rotation was identified to have had a positive influence on the learning which occurred in V-ball. Aroha elaborated:

It's fun to try other positions, so you like get an idea of what they're all like so like if you played it or whatever then like if you go to defence or whatever then you like have an idea like with V-ball (Aroha, netball & V-ball).

While findings of this study have indicated differences between quantitative and qualitative results with regard to perceptions of autonomy, similar findings have been made regarding the satisfaction of relatedness. As seen in Table 5, netball players expressed higher levels of relatedness than V-ball players or players of both games. Results of a one-way ANOVA indicated there was a significant difference between players' satisfaction of the basic psychological need of relatedness ($F_{(2,58)} = 4.449$, $p = 0.016$). Results of Tukey's post-hoc testing indicated that netballers' perceptions of relatedness were significantly higher than V-ball players ($p = 0.031$) and players of both games ($p = 0.011$). In qualitative results however George, a V-ball player, indicated that perceptions of relatedness were supported by the implementation of positional rotation in V-ball:

you get to play in most bits of the court and with people at both ends, like you don't really have to stop in the middle or anything and I like that you can be with everyone too, not like stuck at one end (George, V-ball).

Qualitative data have shown that due to enhanced active participation and game engagement the use of positional rotation in V-ball contributed to individuals' positive perceptions of autonomy. It is important to acknowledge the previously mentioned comparative quantitative findings.

Theme two: Building skills and confidence.

A number of factors have been identified by netball and V-ball participants to positively or negatively affect their ability to build skills and confidence. In response to RQ 1 and RQ 2 (as

previously identified), Figure 8 presents the second higher order theme: Building skills and confidence and the lower order themes according to their predominance and context of their presence in netball or V-ball. The absence of contextual and numerical data associated with any lower order theme indicates that no evidence of this topic emerged in participant responses.

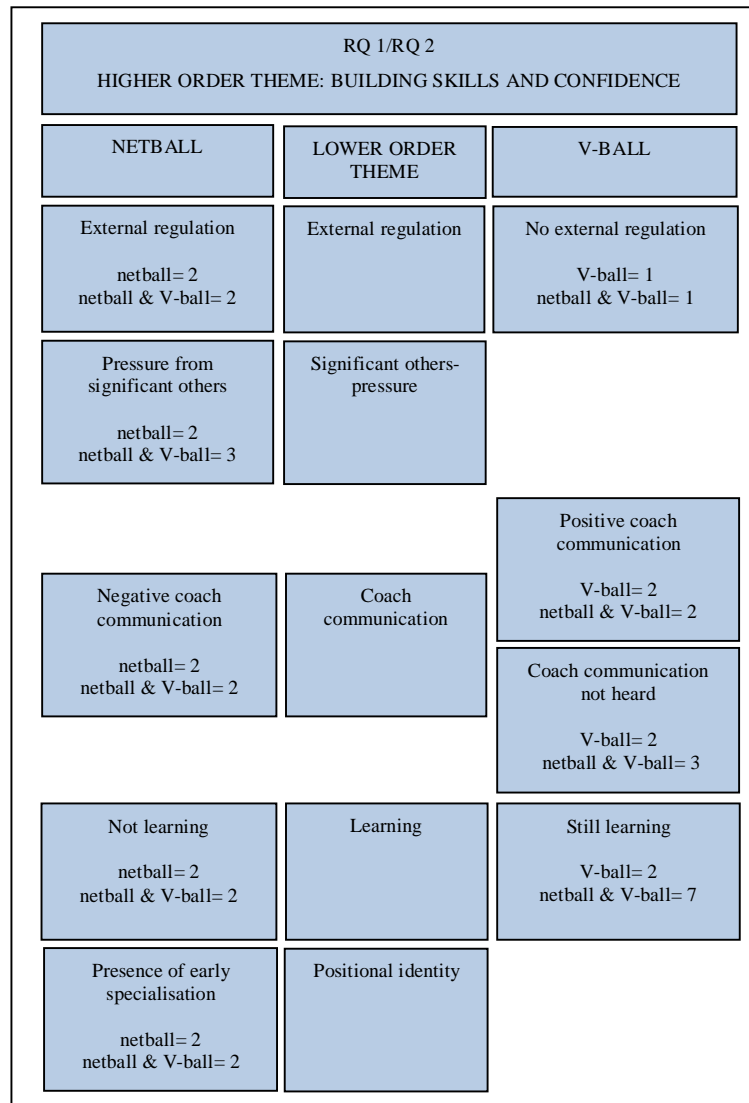


Figure 8: Higher order theme two: Building skills and confidence and contributing lower order themes.

External regulation. One of the findings which emerged from interviews held with netball participants was a general perception, and acceptance, that their behaviours in the game were externally regulated. In contrast to the previously identified quantitative findings on the satisfaction

of autonomy in netball, participants highlighted their anticipation that decision making opportunities would not be provided to them, instead others were expected to provide instruction. A player of both games, Aroha, elaborated:

People are always like òdo thisö, òdo thatö and like if you were allowed to try your own, like, tactics sometimes thení .people just need to like trust a bit more or, like, if I could try what I thought might make the situation better (Aroha, netball & V-ball).

While the existence of external regulation in netball was clearly identified by players, it is important to note that this level of regulation was accepted as a characteristic of the sport. Peppa explained:

I donøt really say that much, like, I just kind of do what Iøm told to do. I donøt mind, thatø just netball (Peppa, netball).

On the other hand, V-ball participants described the existence of a contrasting environment. When asked if individuals felt that they could be themselves in V-ball participant responses indicated a comparatively decreased sense of concern over externally regulated consequences. As Alex, a V-ball player saw it:

If I wanna do something I just do it and I have fun and that so Iøm just me, like Iøm not worried or anything (Alex, V-ball).

Describing her response with short, sharp body language depicting a small and restricted space, Olivia made comparisons to netball when describing the lack of regulation perceived in V-ball:

In netball we have to like stay to this area (using hands) but in V-ball we can like pretty much just say you go up there and Iøll go down here and mix it around a bit (Olivia, netball & V-ball).

These findings have highlighted the existence of contrasting environments in netball and V-ball with regard to the external regulation which participantsøreceived.

Pressure received from significant others. In light of the findings presented with regard to external regulation further evidence of the noteworthy effect of pressure received (from significant others) in netball has emerged. When asked to indicate their reasons for playing netball, both of the netball players and three of eight players of both sports referred to their perceptions of pressure. One of the outcomes of receiving such pressure in netball (from significant others) was indicated to influence individuals' reasons for participation. On her reasons for participation in netball, Carmen responded:

Mum wants me to be really good at it (Carmen, netball & V-ball).

Netball players identified the pressure they received from significant others to be imparted via negative communication. This pressure was explained to decrease participants' confidence and their ability to play the game. A finding supported by individuals' expressions of this information with less confidence, lowered speaking volume and a decreased use of body language:

If I'm shooting bad and they say something bad then that's it, like, I just get worse. Well maybe not worse, but like, I put my head down and it's way harder after that. But I try to just get on with it 'cause some of my team gets upset though (Peppa, netball).

It is of interest that no evidence of pressure emerged in qualitative data regarding participation in V-ball.

Coach communication. Considerable differences have emerged with regard to the coach communication received by participants in netball or V-ball. Through the use of exaggerated body language and facial expressions netball players and players of both games described coach communication in netball to be controlling and unsupportive:

with our coach yelling and, well maybe not yelling, just supporting and coaching in her own way, ha-ha (laughing), yeah, it's just yeah. I wish they would let us play our own game rather than giving us, um, ideas off the side line (Olivia, netball & V-ball).

Sometimes she's just not so friendly or nice or something so sometimes I am a little nervous (Myla, netball).

Comparatively, the coach communication received in V-ball was described as being helpful and to provide autonomy support:

I can't really hear what she says, I'm not sure she says that much but like she tells us we are doing good at the breaks and our positions and stuff so that's cool and she doesn't like put us off or tell us off or anything during the game so it's cool (George, V-ball).

Olivia, a participant of both games, explained the result of receiving autonomy supportive coach communication in V-ball:

You can like keep your mind on the game and yeah do your own thing (Olivia, netball & V-ball).

Learning. Netball participants have identified that, due to their age and amount of playing experience, they no longer learned new skills. Interestingly, participants made reference to the absence of learning when describing their perceptions of boredom. When asked if participants learnt new things in netball the following responses were provided:

I know all the rules, I've done it kind of like my whole school life and it's there and getting sort of old (Olivia, netball & V-ball).

I'm 12 now and been playing like ages so we don't really learn new stuff. We just go over stuff we already know (Peppa, netball).

Despite the lack of new learning, quantitative measures have identified that netball players had higher perceptions of competence than V-ball players or players of both games (see Table 5). Results of a one-way ANOVA indicated there was a significant difference between players' satisfaction of the basic psychological need of competence ($F_{(2,58)} = 5.57, p = 0.006$). Results of

Tukey's post-hoc testing indicated that netball players' perceptions of competence were significantly higher than V-ball players ($p = 0.014$) and players of both games ($p = 0.005$).

While participants did not highlight increased perceptions of competence as a result of participation in V-ball it is important to note that, without hesitation, players identified a considerable presence of learning in the game. Alex linked the presence of learning to the deterrence of boredom in V-ball:

not ever boring or anything and then you change so you keep learning that bit. Alex (V-ball)

Participants with experience in both netball and V-ball were able to provide a comparative response when indicating the learning which occurred in either game. Mahe, a player of both sports, indicated that having less experience was influential to the amount of learning which occurred:

It's newer than netball to me so I learn shitloads every time (Mahe, netball & V-ball).

The data has shown that increased learning and decreased boredom were experienced in V-ball when compared to that of netball however satisfaction of individuals' need for competence was found to occur at a higher degree as a result of participation in netball.

Positional identity. The presence of positional identity in netball has been made evident due to participants' identification to one position. Qualitative evidence of the presence of positional identity in netball has indicated support for the quantitative finding that satisfaction of individuals' need for competence occurred through participation in the game. Given the age of participants this evidence has also highlighted the occurrence of early specialisation. Mahe, a participant of both games, elaborated:

Ever since day one I've been playing goal shoot. I've been practicing, practicing, practicing and keep going and keep going and going and yeah. It's easy for me to move around in that area coz it feels like this is my castle, get the hell out of it, you know?

(Laughing) Its mine, I'm gonna shoot that hoop. Yeah so it's mine, goal shoot, GS is me (Mahe, netball & V-ball).

As previously identified, netball participants believed positional rotation was acceptable when implemented in junior competitions however, participants saw that positional identity should have occurred once the age of 11-12 years was reached:

We don't rotate, that's only for the little kids. Na, we have our own spots now (Myla, netball).

A noteworthy comparison has been made through evidence between the presence of positional identity (and subsequent early specialisation in netball) and the fact that no evidence of positional identity existed in V-ball. The section that follows presents the findings of players' perceptions of team cohesion in netball and V-ball.

Section two: Team cohesion

Theme three: Being an active team member.

In this section evidence of quantitative and qualitative data analysis is provided on netball and V-ball participants' perceptions of team cohesion in either sport, in response to RQ 3 and RQ 4.

RQ 3: What are players' perceptions of team cohesion in netball?

RQ 4: What are players' perceptions of team cohesion in V-ball?

In response to RQ 3 and RQ 4 reference is made throughout this section to the results of quantitative data analysis (Table 6). Further details of the statistical analysis are presented in Appendix K.

Table 6: Means (\pm SD) for participants' perceptions of task and social cohesion.

Group	Task cohesion	Social cohesion
netball	4.42 (\pm 0.54)	4.1 (\pm 0.61)
V-ball	3.44 (\pm 1.21)	3.48 (\pm 1.07)
netball & V-ball	4.06 (\pm 0.79)	4.04 (\pm 0.64)

In response to RQ 3 and RQ 4 reference is also made to the results of qualitative data analysis.

Figure 9 identifies the third higher order theme and the lower order themes which have contributed to this classification. The predominance of each lower order theme is represented numerically as was identified by participants from the three groups; netball, V-ball and both games.

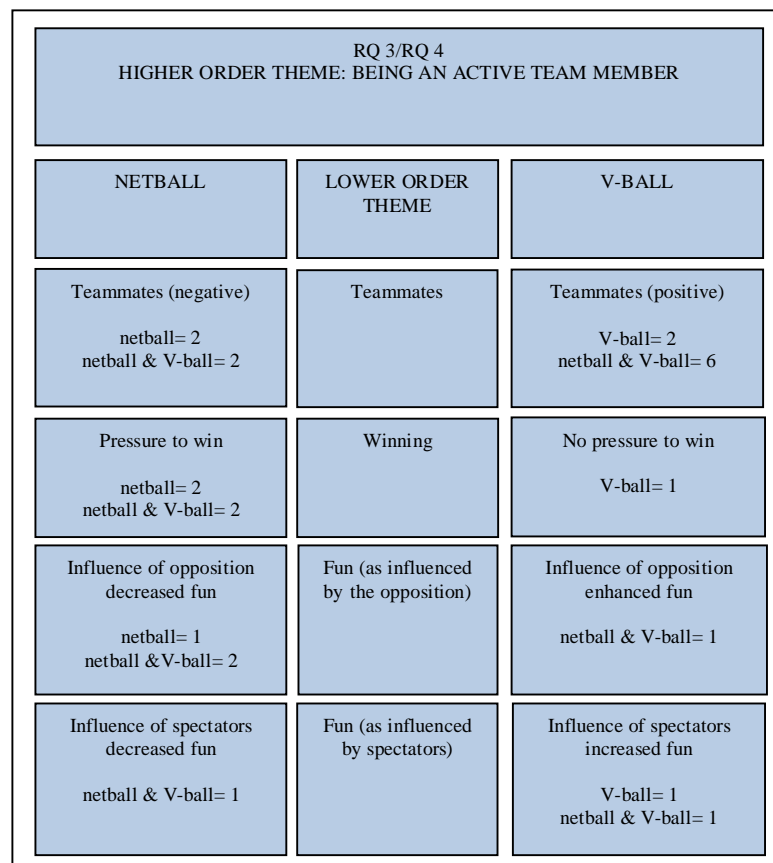


Figure 9: Higher order theme three: Being an active team member and contributing lower order themes.

Teammates. When discussing aspects of social cohesion with regard to participation in netball, individuals of all groups made reference to their teammates however in netball the experiences which individuals had with their teammates were identified as rarely positive in nature. Aspects of social cohesion and relationships with teammates in netball were commonly included in individuals' responses when asked about their least favourite things about the game. Aroha elaborated:

Your team not giving you the ball coz you made a mistake or something, or like they don't think they can trust you or whatever. Or when your team like put you down, oh like "why did you do that?" that just makes you feel, like, unhappy (Aroha, netball & V-ball).

Furthermore, Myla explained the influence of teammates on the social cohesion experienced in netball:

It can be really bitchy and I hate that. Like if someone is in someone else's position or if you, like, miss a pass (Myla, netball).

With similarities to the qualitative findings on players' perceptions of social cohesion in netball is the quantitative evidence which shows a non-significant difference between groups regarding perceptions of social cohesion ($F_{(2,60)} = 2.445$, $p = 0.095$).

By comparison, the qualitative findings indicate that socially cohesive environments were perceived by V-ball participants. When describing their favourite things about the game both of the V-ball players and six of eight players of both games indicated the existence of socially cohesive environments within their V-ball teams. Grace, a player of both games, identified her favourite thing about V-ball:

...hanging out with friends, playing with them and its fun (Grace, netball & V-ball).

Moreover, Alex revealed that enhanced fun and autonomy were experienced as a result of the socially cohesive environment perceived to exist in V-ball:

I really look forward to each game I think coz we all like have fun, like my friends on my team, and me, and that. So it's fun with them and that but I like, I can shoot from ages away too, even though I usually miss (laughing). But, no one gets shitty and that's cool and it's just fast and I, yeah, I love it (Alex, V-ball).

Winning. Netball participants described winning as an important and essential aspect of the sport. It was within qualitative findings that the presence of task cohesion in netball was made evident. These findings were supported by the results of quantitative analysis. As can be seen in Table 6, players of both games expressed higher levels of task cohesion than V-ball players. Results of a one-way ANOVA indicated there was a significant difference between players' perceptions of task cohesion ($F_{(2,60)} = 5.481, p = 0.07$). Results of Tukey's post-hoc testing indicated that netball players' perceptions of task cohesion were significantly higher than V-ball players ($p = 0.02$). Players of both sports held significantly higher perceptions of task cohesion than V-ball players ($p = 0.047$).

Qualitative findings have indicated the presence of task cohesion in netball however identified winning orientations to be an outcome. These orientations were suggested by participants to have a less than positive influence on their experiences in the game. Peppa, a netball player, explained:

I don't really like it when my coach or my teammates get like really intense. You know like sometimes bad things are said and all that, and I really hate that, but I think it's just coz we really wanna win so it's ok then (Peppa, netball).

These winning orientations were further described by netball participants to result in perceptions of pressure and nervousness. Mahe, a player of both games, explained:

It's really nerve, it's really nerve racking when you're on the um, on the court, and you like you get really nervous like oh my gosh we have gotta win this game and just, just like you've got to just like think positive and play hard. And yeah like play fair (Mahe, netball & V-ball).

In contrast to these findings, only one V-ball participant mentioned winning. However in doing so he highlighted its absence in the game. George, a V-ball player, explained:

I'm not sure we worry much about winning. I don't know why not but we just have fun and, before we play, we know it will be fun so yeah. Like each game we always had fun at (George, V-ball).

In opposition to the task cohesion and winning orientations identified to exist in netball were those of V-ball where the lack of pressure to win and decreased perceptions of task cohesion were clear.

Fun (as influenced by the opposition). It has emerged that the fun which participants perceived when playing netball or V-ball was influential to their experiences of social cohesion. Evidence has indicated that the interactions which individuals shared with opposing team members in netball were negative in nature. Myla explained:

The opposition sometimes talk to us but that's not always so nice (laughing) .. It's usually just dumb like bitchy stupid talk. I get really pissed off sometimes but you know like try not to and that. It's annoying as though (Myla, netball).

In contrast to these interactions was the positive communication which V-ball participants indicated they shared with their opposition. Of her experiences in V-ball Olivia, a player of both sports, recalled:

In V-ball it's more like, friendly, and like I remember that the opposition like has conversations with us and, like, it's just more like relaxed (Olivia, netball & V-ball).

It has been demonstrated through quantitative findings that the social cohesion experienced by V-ball participants was supported by the fun and positive nature of interaction shared with opposing team members.

Fun (as influenced by spectators). Netball spectators were identified to include the parents and siblings of team members. Results indicate that spectators had a negative influence on the fun

and social cohesion experienced by netball participants. Through the use of negative facial expressions and exaggerated body language Olivia, a player of both sports, explained the effect of spectators in netball:

In netball, like some of the spectators get a bit like um, (facial and hand gesture) like grrr and yeah like the spectators are a bit annoying (Olivia, netball & V-ball).

V-ball spectators were identified as the parents of participants however, due to the later game times; spectator numbers were less and rarely inclusive of players'siblings. Olivia, a player of both games, provided a comparison with regard to spectatorship:

We had the same amount of support but probably different supporters coz we played at night time í . A better group of people I'd say (Olivia, netball & V-ball).

Evidence has indicated that perceptions of team cohesion were present in both netball and V-ball. Distinct differences have been highlighted however between the orientations of cohesion in either game.

Verification of lower order themes

In efforts to further increase the trustworthiness and content validity of findings a measure of lower order theme verification was conducted with two participants of netball and V-ball. A process of 'member checking' (Bui, 2009, p. 185) was implemented as explained in Chapter three: Methodology.

The results of this process are presented in Table 7. Taken together theme verification for this study's lower order themes resulted in an overall total of 70% for V-ball participants and 75% for netball participants. These results should however be interpreted with caution as this analysis is only for basic confirmation. Please note that results are displayed according to each participant's reference to either V-ball (V1, V2) or netball (N1, N2).

Table 7: Verification of lower order themes as indicated by two participants of netball and V-ball (responses scored zero to 10, 10 indicating highest level of verification).

Lower order theme	V1	V2	Agreement %	N1	N2	Agreement%
Speed	7	8	75	8	9	85
Playing time	6	7	65	9	9	90
Learning	6	8	70	10	10	100
Positional rotation	8	9	85	7	6	65
Able to make decisions/do things by yourself	7	7	70	9	9	90
Communication with the coach	7	7	70	10	10	100
Teammates	10	9	95	10	10	100
Winning	9	10	95	9	10	95
Pressure from parents/adults	6	6	60	6	5	55
Having my own position	5	6	55	9	9	90
Having fun	9	10	95	9	9	90
Opposition positive	7	8	75	7	7	70
Opposition negative	4	4	40	6	4	50
Spectators positive	9	9	90	8	8	80
Spectators negative	3	3	30	5	3	40
Overall agreement (Average %)			71			80

Summary

This chapter has presented the findings of this study in two sections. Initially data was presented in response to RQ 1 and RQ 2 where two higher order themes were identified; 1) Active participation and 2) Building skills and confidence. In the following section data were presented in response to RQ 3 and RQ 4 and a third higher order theme: Being an active team member was identified. This chapter has been concluded with the results of a member checking verification process.

CHAPTER FIVE: DISCUSSION & CONCLUSION

The aim of this study was to compare perceptions of self-satisfaction and team cohesion experienced by individuals (11-12 years of age) when playing netball, a modified netball game (V-ball) or both games. In order to meet this aim a mixed methodology was implemented. The arrangement of this discussion follows a 'parallel ladders strategy' (Bui, 2009, p. 194) where discussion occurs as topics pertain to each RQ as consistent with the structure of the previous chapter. Throughout this chapter reference is made to relevant literature and previous research as introduced in Chapter Two: Literature Review. The use of pictorial references in quantitative research with youth participants is also discussed as are the limitations of the study. Following these discussions is the conclusion where the key findings of this research are presented and future recommendations are made. This chapter is summarised by the final comment of this thesis.

RQ 1: What are players' perceptions of self-satisfaction in netball?

RQ 2: What are players' perceptions of self-satisfaction in V-ball?

Self-satisfaction

As presented in the previous chapter, in response to RQ 1 and RQ 2, two higher order themes emerged through the analysis of data. Theme one refers to participants' active participation in netball and V-ball while Theme two surrounds the skills and confidence which were built as a result of participation in either game.

Theme one: Active participation.

According to Hill and Green (2008) participants of youth sport just want 'to play the game' (p. 200). When able to actively participate in game play it has been argued that; opportunities are provided for individuals' needs to be met (Frederick-Recascino & Morris, 2004), for skill development to occur and for the benefits of sport to be received (Hill & Green, 2008). Positive perceptions of self-satisfaction could therefore be considered to be a result for all who participate in

sport, however a number of factors have been identified in literature and previous research to present challenges in this regard, a number of which have been similarly identified in this study.

Netball is a game of four x 10 minute quarters (at junior levels) with seven on-court players per team and two umpires. Each player has a specific position which determines their roles and permitted boundaries of play. The traditional netball game does not use positional rotation however, as previously mentioned, positional changes may be made during specific breaks in play. Some of the common infringements which occur in netball surround rules of contact (netball is a non-contact sport), obstruction (players are required to defend at a distance of no less than 0.9m), held ball (players may only have the ball in their possession for a maximum of three seconds) and stepping (players are not allowed to travel with the ball).

Strong evidence was found to suggest that netball participants perceived the game as being highly structured. This level of structure appears to have challenged individuals' ability to actively participate in the game. In previous research netball has been identified as a dynamic and intermittent sport (Bloomfield, Polman, O'Donoghue & McNaughton, 2007), a notion reinforced in literature which states that netball possesses a staccato rhythm (Murray, 2008). It was the intermittent, or stop/start, nature of netball which was indicated to limit the speed of the game and identified as a cause of participant frustration.

The umpire like always blowing the whistle and you have to keep, like, stopping for that and standing down (Peppia, netball).

In their research on understanding participation in sport and physical activity Allender et al. (2006) identified that youth sport participants dislike highly structured games. With similarities to the findings of Allender et al. (2006) the restrictive outcomes of netball's high structure was identified among participants' least favourite aspects of the game.

As previously mentioned, V-ball is a modified version of the traditional netball game in which teams have five on-court players who occupy three differing roles and where only one umpire is

used. As seen in Figure 1 and Figure 2, the V-ball court provides larger boundaries for the shooting and defence positions when compared to that of netball. V-ball also allows more participants the ability to shoot from increased areas of the court (Gunson, 2012). Due to the modifications made in V-ball's game design participants appeared to experience increased ball handling and time on task while decreased restrictions on stepping enabled individuals to experience greater movement on court. Decreased restrictions to the way in which penalties were set in V-ball meant that infringing players were less disadvantaged, when compared to that of netball, and as a result remained engaged in the game. It appears that these game modifications were linked to participants' perceptions that V-ball had a contrastingly decreased game structure to that of netball.

I love that you can run around and kind of be involved all over the place and not like have rules. Well like there are rules, but you can still just like go for it and try things if you want to and that and I love that it's fast (George, V-ball).

V-ball players indicated that the game was played with more speed and that increased freedom was experienced as a result of less restricted play and decreased game structure. These factors appear to have enhanced the fun experienced by participants. In light of these findings it appears that a number of the aims of V-ball have been met, such as: for participants to experience free flowing game play, high time on task and social interaction (Gunson, 2012). Acknowledgement of participants' differing perceptions of the two sports is of importance as they may explain the dissimilarities in BPNS which were found between netball and V-ball players (Mageau & Vallerand, 2003) as well as their varying desires for continued participation (Hill & Green, 2008).

Participants' desire to actively participate in their sport was clear in the importance which individuals placed on the playing time received in netball or V-ball. Support for this finding exists in previous research and literature where having adequate playing time in youth sport was identified as a need of all participants (Fraser-Thomas et al., 2005; SPARC, 2006). These findings are of importance as active participation has been suggested to be crucial to individuals' experiences in sport (Hill & Green, 2008). Moreover, it is only through active game participation

that individuals' physical, social, emotional and intellectual development can occur (Tremayne & Tremayne, 2004).

It has been identified that the playing time which all V-ball participants received increased when positional rotation was implemented. As the benefits of sport and needs of youth participants appear to be more likely to occur when individuals are provided opportunities to play the game, positional rotation appears to be a worthwhile implementation in the design of youth sports.

Alongside the highly structured nature of netball, discussion with individuals regarding active participation was dominated by their concerns over the lack of playing time they received. Within the data collected in qualitative interviews, netball participants explained that in order to gain playing time they felt a need to prove their competence over that of their teammates. These findings are consistent with previous research where not receiving adequate playing time was identified as a reason for decreased enjoyment (Hill & Green, 2008).

Interestingly, quantitative results have identified that netball participants perceived greater competence when compared to that of V-ball participants. These findings may be explained by the increased amount of experience which netball players had in specific positions, in the absence of positional rotation, which appeared to enhance individuals' perceived competence in a specific skill set. Qualitative results added to these findings by indicating that netball players perceived little competence outside of these specialised positions. Furthermore, through qualitative measures it was identified that netball participants perceived a need to prove their competence in order to avoid being placed in substitution roles. These findings are of importance as the findings of previous research have indicated that when individuals were placed in substitution roles repeatedly; non-engagement and decreased active participation occurred while development was limited. Interestingly, it was the participants placed in these substitution roles who were either withdrew from sport or transferred to other teams before the end of the season (Hill & Green, 2008). As non-engagement appeared to result in participant boredom, the findings of previous research and

literature are important to consider as perceptions of boredom have been suggested to lead to participants' withdrawal from sport (Bigelow et al., 2001; Mulvihill et al., 2000).

Comparative findings have emerged with regard to the playing time received in V-ball and the contrasting perceptions of participants regarding the need to prove their competence. More specifically, the implementation of positional rotation in V-ball was explained during interviews to have a positive impact on participants' satisfied need for relatedness, largely due to team members' experiences of equal involvement. As supported by previous research, it was found that receiving adequate playing time increased participants' attendance and improved team cohesion (Hill & Green, 2008). Therefore, as consistent with suggestions made in literature (Bigelow et al., 2001; SPARC, 2006) it appears that a focus of youth sport should be providing increased opportunities for all participants to receive adequate playing time where various needs can be met and development can occur.

An interesting link has emerged in this study between the level of participants' engagement in the game and their awareness of the external environment. It appears as if high time on task (SPARC, 2006); positional rotation, decreased game structure and increased game speed were among aspects of the design of V-ball which contributed to increased participant engagement. An additional aspect of V-ball which increased player engagement was due to the game being played on the same sized court as netball (see Figure 2) however with increased areas of movement for majority of positions as well as decreased team sizes.

I can go everywhere and do heaps (Alex, V-ball).

As a result of these game modifications the interaction between V-ball players and their dependence on one another (to move the ball down court) appeared to increase, as did the extent of individuals' engagement. Furthermore, increased game engagement appeared to result in a noticeable decrease in participants' awareness of the external environment. As increased game involvement appeared to decrease individuals' awareness of any negative communication from significant others these findings may indicate, to some extent, why V-ball participants did not

identify any perceptions of pressure. These findings appear to support the use of smaller team sizes in youth sport as a means to increase participant engagement.

As consistent with suggestions made by Tremayne and Tremayne (2004) evidence has indicated that the implementation of positional rotation increased V-ball players' opportunities for development across social, emotional, intellectual and physical domains. These findings are of importance as active game participation (Hill & Green, 2008), learning new skills (Brady, 2004; Smoll, 2001), experiencing time on task (SPARC, 2006) and receiving opportunities for development (Tremayne & Tremayne, 2004) have been identified as reasons, and aims (Smoll & Smith, 2002) for youth's participation in sport.

As supported in literature (Carron & Dennis, 2001) qualitative evidence has indicated that, due to positional rotation in V-ball, participants' perceived satisfaction of their need for relatedness as a result of sharing closer proximities and opportunities for interaction between an increased number of team members. The use of positional rotation in youth sport has been further supported by the findings of previous research where it was identified to provide opportunities for development to occur in a wider range of game skills and concepts (Côté et al., 2009; Hill & Green, 2008), to promote a broader range of development (Côté et al., 2009) and to allow equal involvement for each team member (SPARC, 2006). Interestingly, all players of both sports, including both V-ball players, explained favourable views of positional rotation in V-ball.

With regard to the satisfaction of individuals' need for relatedness, quantitative results have indicated that netball participants perceived higher relatedness than that of V-ball participants. In light of the fact positional rotation was not implemented in netball, the discrepancy in results may be explained by individuals perceiving greater connectedness when their positional decisions reflected those of their significant others in netball.

Mum wants me to be really good at it (Carmen, netball & V-ball).

Netball participants also explained perceptions of relatedness as a result of the familiarity experienced in specific on-court playing combinations with other team members. It is clear then, that individuals experienced relatedness when participating in netball and in V-ball however the reasons for this satisfaction differed. These findings may explain why both netball participants and six of 10 participants of both sports expressed their dislike of positional rotation in netball. Reinforcement of these results appeared to occur in the positional identity and early specialisation of netball participants which has been identified to occur when individuals limited their game involvement to one area of play (Hill & Hansen, 1998). A common suggestion among netball participants was that positional rotation was a game modification for use with younger players.

We don't rotate, that's only for the little kids. Na, we have our own spots now (Myla, netball).

Contrasting opinions have been presented in previous publications however where the initial abilities of participants have been indicated to have little relation to those which will be possessed in the future (Brady, 2004; Côte et al., 2009; Hill & Green, 2008). In addition, early specialisation has been suggested to limit the development and enjoyment which participants experience (NNZ, 2007b), potentially shorten peak performance (Côte et al., 2009) and has been linked to early withdrawal from sport (Côte et al., 2009). These suggestions reinforce Rushall and Pyke's (1990) opinion that early specialisation should be avoided in consideration of youth participants.

In the absence of positional rotation it has also been suggested that participants who are left on the side line, and therefore receive less developmental opportunities, are often perceived to possess less skill than that of their teammates (Tremayne & Tremayne, 2004). Many studies have accumulated similar information and indicated that participation in a variety of game contexts is of importance to the development of youth in sport (Brady, 2004; Côte et al., 2009; Hill & Green, 2008; McCarthy & Jones, 2007; Rushall & Pyke, 1990). As a result of wide support found in literature and the results of this and previous research, positional rotation in youth sport appears to be

worthwhile implementation in consideration of individuals' development and in order to meet the suggested aims of youth sport.

A key finding in this study was discovered in evidence which showed the considerable influence of the extent of a game's structure on the fun and engagement which participants experienced. As having fun in sport has been identified as a specific need of individuals during youth (SPARC, 2006) and as a reason for participation (Bigelow et al., 2001; Ewing & Seedfeldt, 2002; Kidman, 2005; Mulvihill et al., 2000; Outdoor Foundation, 2008) this finding is of clear importance. While it is worth noting that there may be individuals who wish to excel in sport during this stage of life, these findings encourage the design of youth sport to emphasise and provide maximum opportunities for development and social interaction.

Consistent with the suggestions of others (Bigelow et al., 2001; Mulvihill et al., 2000; Tremayne & Tremayne, 2004) evidence has shown that both V-ball players and six of eight players of both games experienced fun as an outcome of participating with friends in V-ball. These findings have been supported in previous research where an increased desire for continued involvement was identified when fun was experienced as an outcome of participation in modified games (Balakrishan et al., 2011; Hill & Green, 2008).

Contrasting evidence has been identified with regard to the fun perceived as a result of participation in netball. More specifically, only one netball participant included fun in their interview response. It is of interest however that this response was provided in a negative context.

I like it and that but I'm not sure it's always like fun, fun you know? Like sometimes it's quite, like, I feel really like rushed a bit or like pressured and that so when I do maybe it's not so like enjoyed you know? (Peppa, netball).

Hill and Green (2008) believe that an assumption exists that participation in sport is a source of enjoyment for youth. In light of contrasting findings which have emerged, it appears that such an assumption may not be applicable for all participants. This acknowledgement is of importance as

no longer having fun has been identified as a reason for youth's withdrawal from sport (Bigelow et al., 2001; Sabo & Veliz, 2008).

With regard to V-ball however, qualitative data indicated that individuals perceived satisfaction of their need for relatedness and that fun was experienced as a result of active game participation with friends.

I really look forward to each game I think coz we all like have fun, like my friends on my team, and me, and that. So it's fun with them í ..(Alex, V-ball).

These findings are consistent with previous research which identified social involvement and friendships as sources of enjoyment for youth sport participants (McCarthy & Jones, 2007). Interestingly, similar findings did not emerge with regard to netball as participants did not refer to their teammates as 'friends' which appeared to have negatively affected the fun which individuals experienced. As a result of participation in sport a number of benefits are able to be received. Therefore it is of importance that youth sports are designed in light of the findings which indicate that the modifications implemented in V-ball's game design were found to encourage and support individual's perceptions of fun.

In summary, evidence suggests that active participation in youth sport can be influential and essential to individual's perceptions of self-satisfaction. A key finding has been the effect of the differing extents of game structure in netball and V-ball on the fun which participants experienced. Aspects of games' structure which were found to effect participants' perceptions of self-satisfaction most notably were the implementation of positional rotation, or the use of substitution roles, and the amount of playing time received as a result. The following section will discuss the findings of Theme two: Building skills and confidence.

Theme two: Building skills and confidence.

The developments of self-confidence (Mulvihill et al., 2000; NNZ, 2008b) and sporting skills (Ewing & Seedfeldt, 2002; Smoll, 2001) have been identified among the benefits of participation in

youth sport. The occurrence of each of these benefits appears to provide relevant examples of BPNS; needs which Deci and Ryan (2004) believe all individuals are motivated to satisfy. Despite the identified link between BPNS and building skills and confidence, evidence suggests that varying outcomes have occurred as a result of participation in netball and V-ball. Quantitative results have highlighted that netball participants' need for autonomy was satisfied, perhaps due to the increased playing experience and familiarity which participants had in specific positions and the belief that they knew what to do, as reinforced by coach instructions. These findings were clearly explained by netball participants whose interview responses illustrated the presence of externally regulated environments and highlighted that, as a result, participants did not feel they had the freedom to choose what skills to execute or when to execute them. Instead participants indicated their expectation that this information would be provided to them (by significant others).

I don't really say that much, like, I just kind of do what I'm told to do. I don't mind, that's just netball (Peppa, netball).

By comparison, V-ball players expressed their perceptions of freedom as a result of the decreased game structure and a comparative coaching environment (to that of netball) which has indicated a satisfaction of V-ball participants' need for autonomy. With regard to the players' perceptions of autonomy a clear contrast has emerged in quantitative and qualitative data. It is in light of this disparity of results that the technique of participant recruitment is considered.

Interview participants were selected as a result of their positive response to an invitation to participate, following the completion of this study's questionnaire. As outlined in Chapter three: Methodology, the process used for recruitment was purposive sampling (Mutch, 2005; Yin, 2011). Identified as a limitation of this research, the use of random sampling (Burns, 2000), may have provided more useful results as a more varied group of individuals may have been interviewed, as opposed to those who felt they had something to say or who were simply more confident than others to volunteer to be involved.

Evidence suggests that the extent of external regulation in netball and V-ball was influential to participants' ability to experience BPNS; a key finding in this study. While reliance on significant others may have been conducive to the satisfaction of individuals' perceptions of relatedness, as consistent with Mageau and Vallerand (2003), it is possible that participation in these environments contributed to players' orientations of extrinsic motivation. Orientations of extrinsic motivation may have been influenced by participants' feeling un-trusted (Deci & Ryan, 2000) or as a result of individuals' aims to meet external outcomes (Mageau & Vallerand, 2003). These findings are of importance as orientations of extrinsic motivation have been identified to negatively affect the length of individuals' game involvement, to increase drop-out rates (Frederick-Recascino & Morris, 2004) or to have a negative effect on individuals' intentions for future participation (Frederick & Ryan, 1993). It is therefore possible to suggest that participants' orientations of extrinsic motivation may have contributed to a number of netball participants' decisions to withdraw from the sport or their uncertainty regarding continued participation. An additional outcome of participation in externally regulated environments was the expectation that players would receive decreased playing time if their on-court decisions or actions conflicted with the ideas of the coach.

we get told from our coach what we are gonna do that game and that and I guess that, like, if you don't do that then like you'll probably come off and, like, yeah so everyone like wants to play (Peppa, netball).

These findings are consistent with Mageau and Vallerand's (2003) suggestions that externally regulating environments provide non-autonomy support. Moreover, the presence of external regulation in netball appeared to encourage individuals to surrender their autonomy in order to cooperate with external demands.

Comparatively, no evidence was found to suggest that external regulation was perceived by V-ball participants. Instead, V-ball players appeared to have orientations of intrinsic motivation and indicated that their participation occurred in environments of autonomy support. These findings

have highlighted a link which has emerged between participants' perceptions of a relaxed environment in V-ball and their perceptions of intrinsic motivation.

In V-ball it's more like, friendly, and like I remember that the opposition like has conversations with us and, like, it's just more like relaxed (Olivia, netball & V-ball).

These findings are consistent with Mageau and Vallerand (2003) who have identified a link between autonomy supportive environments and the presence of intrinsic motivation. Similarly, Baard et al. (2004) have found youth's participation in autonomy supportive environments to encourage BPNS. The findings of Baard et al. (2004) and Mageau and Vallerand (2003) have identified a circular relationship between the development of BPNS and that of intrinsic forms of motivation. Regardless of the order of this development it is clear that individual's BPNS is closely related to their orientations of intrinsic motivation (Weinberg & Gould, 2011). In light of previous suggestions that the experiences which youth have in sport are influential to their future sporting endeavours (Fraser-Thomas et al., 2005; Tremayne & Tremayne, 2004), and that intrinsic motivation may assist individuals to realise the intrinsic importance and value of a given activity (Mageau & Vallerand, 2003), these findings encourage and support the development of intrinsic motivation and BPNS in youth sport.

As previously identified, the decreased engagement of netball participants may have heightened their awareness of external environments. However, as supported in previous research, the enjoyment which youth participants perceived appears to have been strongly influenced by the involvement of their parents, coaches and peers (McCarthy & Jones, 2007). Additional support for this identification has been provided by Mulvihill et al. (2000) who identified the expectations and attitudes of parents, as well as the influence of peers and significant others, as two influential factors of youths' participation in sport. Evidence suggests that netball participants perceived coach communication as being negative in nature which appeared to reinforce their perceptions of external regulation in the sport. This was supported by two netball participants who, with decreased confidence, described their coaches' communication as 'yelling'

with our coach yelling and, well maybe not yelling, just í . coaching in her own wayí . I wish they would let us play our own game rather than giving us, um, ideas off the side line (Olivia, netball & V-ball).

Coach communication of this nature has been suggested not to provide environments of autonomy support and, as these findings show, result in participant nervousness (Mageau & Vallerand, 2003). An important finding has emerged in previous research where coach communication in controlling environments was identified as a source of distraction and to affect the concentration of youth sport participants (Walters, 2011). Regardless of whether or not coaches believe in providing autonomy supportive environments, it has been suggested that controlling behaviours are more likely to be expressed in sports where high levels of pressure and stress exist (Mageau & Vallerand, 2003). As coach perceptions were not researched in this study it is unclear whether or not netball coaches had similar perceptions of pressure. However, as participants perceived netball to be played in pressured environments it could be assumed that within this environment coaches' perceptions of pressure were similarly affected.

Perceiving pressure in youth sport has been suggested to negatively affect participant satisfaction (Kidman, 2005) and enjoyment (Bigelow et al., 2001; Kidman, 2005; McCarthy & Jones, 2007) and to potentially result in orientations of extrinsic motivation (Frederick-Recascino & Morris, 2004). Evidence has indicated that netball participants perceived considerable pressure to perform competently, primarily in order to gain playing time over other team members however also to meet the expectations of their significant others. As consistent with suggestions made by Carron and Dennis (2001) perceptions of pressure appear to have negatively affected participants' relationships with their significant others (including teammates) and, as a result, satisfaction of their need for relatedness. Similar findings have occurred in previous research where extrinsic motivation was a suggested result of individuals' attempts to please their significant others (Walters, 2011). Moreover, due to the resulting pressure to do so (and competitive stress received in the process) were identified among reasons for youths' withdrawal from sport (Allender et al., 2006; Bigelow et al., 2001; Tremayne & Tremayne, 2004).

In this study further questions have emerged with regard to the considerable differences in pressure perceived by netball and V-ball participants. It is possible that the long history of netball in New Zealand (Murray, 2008) and its current status (as the primary sport for females nationwide, SportNZ, 2012a) may have been responsible for individuals increased exposure to the sport however, as a result of the increased knowledge of the game this may have contributed to the expectations which significant others held of netball participants. Additionally, it was found that netball participants associated their positional identity to mirror that of their significant others, findings which may be connected to the satisfaction of relatedness identified through quantitative measures.

Evidence suggests that in order to gain playing time netball participants perceived the need to prove their competence over that of their teammates. It has also been identified that Netball participants held perceptions of when playing time was not received. These perceptions are of importance as comparisons made between the abilities of young players and their peers have been suggested to have detrimental outcomes to individuals' perceptions of self-confidence (SPARC, 2006). Similarly, being able to perform competently in sport has been indicated as being increasingly meaningful to the relationships which youth share with their peers (Tremayne & Tremayne, 2004).

Results have indicated a contrasting environment to exist in V-ball where no perceptions of pressure from significant others were expressed. Instead, qualitative data suggested that V-ball coaches provided autonomy support (and autonomy supportive communication) which appears to have supported participants' lack of perceived pressure. These findings are important as BPNS and intrinsic motivation have been suggested to increase in environments where less pressure is received (Mageau & Vallerand, 2003). Qualitative findings have supported these suggestions as the lack of pressure in V-ball appeared to positively affect the fun and BPNS which participants experienced. These findings have been reinforced by suggestions that modified games provide contexts where participants can experience satisfaction (Hill & Green, 2008; Turner, 1996) and fun (Butler et al., 2003) while pressure situations can be purposely implemented when required

(Gabbett et al., 2009). These findings are of importance as in previous research fun has been found to increase participants' desires to be involved in youth sport (Hill & Green, 2008).

Interview responses have also provided evidence to suggest that the pressure which netball participants perceived to perform well decreased their ability to learn, or to try, new things. Therefore it was unsurprising that both netball players and two players of both sports identified that learning was not an outcome of their participation in netball.

I know all the rules, I've done it kind of like my whole school life and it's there and getting sort of old (Olivia, netball & V-ball).

Moreover, it appears that amidst concerns of not meeting the expectations of their teammates and significant others individuals were unwilling to experiment with new things and as a result new learning did not occur. Evidence has indicated that the void of learning in netball contributed to participants' feelings of boredom. Perceptions such as these are of importance as they have been suggested to influence individuals' decisions regarding continued, or discontinued, participation in youth sport (Bigelow et al., 2001) and may have contributed to some players' uncertainty regarding continued participation in netball.

Comparatively, as previously identified, pressure was not found to be perceived by V-ball participants. Evidence suggests that this lack of pressure positively influenced participants' ability to learn new things as supported by two V-ball players and seven of eight players of both sports who considered learning to occur in V-ball. Given that 11-12 years of age has been identified as an important stage of life for individuals' multi-skill learning (CSFL, 2011; SPARC, 2006) and that learning new skills has been identified as a reason for youth participation in sport (Brady, 2004; Smoll, 2001) these are critical findings.

Previous research has reinforced these findings by identifying the implementation of practices away from traditional sporting models as being important to individuals' skill learning (Gabbett et al., 2009). Similarly, the implementation of TGfU and modified games have been indicated to

allow learning to occur at paces suitable to individual's understanding (Balakrishan et al., 2011; Pill, 2006) and therefore enabled the use of decision making in game contexts (Balakrishan et al., 2011). A recommendation for the use of modified games with youth sport participants therefore appears to be supported by others to provide a number of important outcomes of sporting participation during this phase of life.

In summary, findings indicate that building skills and confidence were key factors in player perceptions of self-satisfaction as a result of participation in netball and V-ball. The degree to which environments were regulated was identified to influence the skills which were built and confidence which was developed in youth participants. The external regulation perceived in netball and V-ball environments has been identified to occur to contrasting degrees and as a result evidence has highlighted comparative outcomes on participant's motivation orientations, the pressure received from significant others and the occurrence of learning in either sport.

Summary of self-satisfaction.

One of the main principles of SDT is the satisfaction of individual's basic psychological needs; competence, autonomy and relatedness (BPNS) and the resulting impact on individual's participation in sport (Deci & Ryan, 2004). Findings suggest that active participation, and having opportunities where skills and confidence could be developed, were key to participant's perceptions of BPNS. It has been indicated that individuals will look for opportunities where BPNS can occur, throughout all stages of life (Deci & Ryan, 2004). While evidence identified varying degrees of self-satisfaction as a result of participation in netball or V-ball, as all players desired active participation, it would seem that both games provided opportunities where some extent of BPNS was experienced. These experiences, as an outcome of participation in sport, are important as they may indicate individual's intentions for continued involvement (Deci & Ryan, 2000; Frederick-Recascino & Morris, 2004).

Team cohesion

RQ 3: What are players' perceptions of team cohesion in netball?

RQ 4: What are players' perceptions of team cohesion in V-ball?

Theme three: Being an active team member

As consistent with the suggestion that cohesion is multidimensional (Carron & Dennis, 2001) evidence has identified a wide range of factors to contribute to its development. As similarly found in previous research, youth participants did not make clear distinctions between orientations of task or social cohesion, however reference was made to youth's perceptions of motivation orientations as identified by Eys et al. (2009b). Working together, coach/team relationships, effective communication, chemistry/bonding and equalities in status have been identified as youth's perceptions of task cohesion. Getting along, lack of conflict, provision of support and friendship has been identified as youth's perceptions of social cohesion (Eys et al., 2009b). Participants' references to these perceptions contributed to the researcher's interpretation of findings in the current study. One of the key findings was the significant contrast of winning orientations held by participants of netball and V-ball. Qualitative evidence has indicated that netball participants rarely made reference to the previously identified youth perceptions of task and social cohesion (Eys et al., 2009b). In quantitative data however it was found that netball participants had significantly higher perceptions of task cohesion, in comparison to that of V-ball participants. A noteworthy finding has been the strong desire of netball participants to win which was expressed despite individuals' acknowledgement of the possible consequences.

I like sometimes bad things are said and all that, and I really hate that, but I think it's just coz we really wanna win so it's ok then (Peppa, netball).

These desires appear to have been reinforced by the perceived pressure which netball participants have previously suggested was provided by significant others. These findings have also been

supported in previous research where the pressure which youth received contributed to the importance which participants placed on winning (Hill & Green, 2008).

Upon review of the proposed youth perceptions of task and social cohesion (Eys et al., 2009b) winning orientations have not been identified as a sole reason to thwart either orientation of cohesion. Evidence has suggested however that as a result of winning orientations, detrimental effects have occurred to participant's perceptions of cohesion in netball. As consistent with SPARC (2006) youth participants appeared to have a heightened awareness of competition. In netball, participants indicated considerable perceptions of competition between their own teammates (regarding the playing time received) and opposition team members (regarding game outcomes). These findings have been highlighted in previous research on youth sport where experiences of rivalry have been identified as additional sources of participant dissatisfaction (McCarthy & Jones, 2007). This evidence is of importance in light of suggestions that sporting environments perceived as being too competitive, or to place too much emphasis on winning, during youth may result in participant withdrawal (Bigelow et al., 2001).

Furthermore, winning orientations have been identified to effect participant's learning. As consistent with preceding sections, the learning of component or pre-requisite skills may be more conducive in environments which are not considered overly competitive (Brady, 2004). These suggestions provide support to the previously identified participant perceptions of increased learning in V-ball which were identified in environments where no evidence of winning orientations was found. In light of these findings it would seem that for participation in youth sport to result in outcomes of increased learning; emphasis should not be placed on competition or winning. Instead it may be of benefit to individual's learning if focus was to be placed on building, and participating in, cohesive environments.

In comparison to the winning orientations identified in netball, V-ball players expressed their orientation toward active game participation and to experiencing fun in team situations. According to the findings of previous research, when outcomes of winning were pursued in youth sport it was

identified that opportunities for participants to experience fun were lost (Allender et al., 2006). These findings may explain a link between the absence of winning orientations in V-ball and the fun which participants experienced. Additionally, evidence has suggested that V-ball participants perceived increased enjoyment, cooperative social behaviour and inclusivity. These findings are consistent with the aims of V-ball (Gunson, 2012) and a number of the suggested needs of youth, such as; enjoyment, teamwork and inclusion (SPARC, 2006).

I'm not sure we worry much about winning. I don't know why not but we just have fun and, before we play, we know it will be fun so yeah. Like each game we always had fun at (George, V-ball).

Evidence obtained through quantitative measures has identified that players' perceptions of social cohesion were not significantly different with regard to participation in netball or V-ball. An explanation for the deviation between quantitative and qualitative findings may be the ability of qualitative research to derive deeper information from participants (Johnson, 2002) through use of their own 'frame of reference' (Bogdan & Biklen, 2007, p. 3). It was this ability which allowed more detailed evidence to be found in the qualitative data where it was identified that V-ball participants held strong views of cohesion.

When compared to the perceptions of V-ball players, netball participants had decreased perceptions of social cohesion which were reinforced by their inclusion of negative references to social cohesion (as suggested by Eys et al., 2009b) when identifying their least favourite things about the game.

Your team not giving you the ball coz you made a mistake or something, or like they don't think they can trust you or whatever. Or when your team like put you down, oh like 'why did you do that?' that just makes you feel, like, unhappy (Aroha, netball & V-ball).

The importance of these findings have been supported by others who have stated that having sense of interpersonal attraction within a team (Woods, 1998), experiencing task and social interaction

(Hodge, 2004; Woods, 1998) and having group processes such as communication (Carron & Dennis, 2001) are vital to the maintenance of group cohesion.

As identified in the interview responses of netball participants, examples of negative communication with members of their own team, members of opposing teams and their team coach and significant others were provided. This is of importance as, in previous research; the group process of communication has been identified as one of four indicating factors to individuals' perceptions of task cohesion (Holt & Sparkes, 2001). Moreover, breakdowns of communication have been identified as a barrier to team cohesion (Carron & Dennis, 2001; Weinberg & Gould, 2011). Evidence has clearly indicated that the negative experiences had in netball, especially those relating to communication, were considerably influential to the resulting participant perceptions of cohesion. These findings are of importance as, in previous publications, negative experiences (Brady, 2004) and perceptions of strain (Sabo & Veliz, 2008) between team members have been indicated as likely reasons for participant withdrawal. As previously stated however, for the benefits of sport to be received, individuals need to participate in the game. Environments which support participants' continued game involvement appear essential for these decisions to be made. It therefore seems of importance for youth sport to occur in environments where efforts are made to endorse positive communication as this appears likely to influence the decisions which individuals make regarding continued participation.

The qualitative data has provided examples of V-ball participants' references to the aforementioned aspects of social cohesion (Eys et al., 2009b). While individuals made these references to varying extents, the positive manner of this data was indicative of the positive nature perceived in V-ball.

In V-ball it's more like, friendly, and like I remember that the opposition like has conversations with us and, like, it's just more like relaxed (Olivia, netball & V-ball).

The presence of social cohesion in V-ball was supported by the sense of achievement which participants expressed as an outcome of sharing experiences with teammates, regardless of the outcome of the game (Brady, 2004; Smoll, 2001). These findings are of importance as, in previous

research, the presence of social cohesion has been identified to provide a relevant indication of participants continued participation in sport (Spink, 1995).

The evidence provided by V-ball participants has supported the findings of previous research where a relationship between communication and increased cohesion was identified (Carron & Dennis, 2001). Additionally, the implementation of positional rotation was indicated to provide increasingly equal playing time and exposure to all areas of play between all team members. The implementation of positional rotation in V-ball therefore promoted equalities in status between team members and appeared to increase the interaction and communication which they shared. As effective communication and equalities in status have been identified among youth's perceptions of task cohesion (Eys et al., 2009b) their presence has highlighted the orientations of task cohesion in V-ball.

Comparatively, evidence suggests that players who assumed substitution roles, or were confined to specific areas on court, in netball had limited opportunities to communicate and interact with teammates. As experiencing social significance, relatedness and perceiving belongingness to a team have been suggested as athlete needs during youth (SPARC, 2006) it appears that the effectiveness of youth sports which do not implement positional rotation are questionable. Support has been provided for these suggestions by Tremayne and Tremayne (2004) who have suggested that being provided sporting opportunities where interpersonal skills can be developed is essential during youth. Similarly, being around, and working with, friends have been suggested as reasons for youth's participation in sport (Bigelow et al., 2001; Mulvihill et al., 2000; Tremayne & Tremayne, 2004).

As identified in previous research when positional rotation was implemented (and substitution roles were not allocated) social climates and participant satisfaction increased (Hill & Green, 2008). As supported in previous studies and literature; the enjoyment, satisfaction and relatedness experienced by V-ball players appeared to be influential to their perceptions of cohesion (McCarthy & Jones, 2007; SPARC, 2006). As supported by Carron and Dennis (2001), V-ball

participants' experiences of cohesion in team contexts led to favourable perceptions of their teammates.

...hanging out with friends, playing with them and it's fun (Grace, netball & V-ball).

These findings are consistent with the results of previous research and suggestions made in literature (Bigelow et al., 2001; Mulvihill et al., 2000; Spink, 1995; Tremayne & Tremayne, 2004). In light of these findings it could be anticipated that the implementation of positional rotation in youth sport would be well suited to the development of participant enjoyment, interaction and perceptions of team cohesion.

Summary of team cohesion.

The evidence has suggested that the importance placed on winning as opposed to the importance placed on participation in a friendly environment were key factors in players' perceptions of team cohesion as a result of participation in netball and V-ball. Consistent with the belief that cohesion is multidimensional (Carron & Dennis, 2001) evidence in this study has presented a wide range of factors which contributed to its development such as; communication, friendship and competition. As consistent with Hodge (2004), and with reference to the Conceptual Model of Cohesiveness (Carron, 1982), evidence has suggested that participants held views regarding the functioning of the team as a unit and also regarding individuals' attractions to the team. Participants have identified that importance is placed on differing aspects of cohesion between the two sports: netball and V-ball. These differences may provide an explanation for the findings which suggested that netball participants were orientated toward winning and, by comparison, V-ball participants placed emphasis on positive and social team environments. Despite these differences it appears that in order for individuals to perceive themselves as being a team member effective communication, perceptions of competition and friendships shared between teammates should be acknowledged in the development of youth sports.

Pictorial references

In the questionnaire used in this study a pictorial reference of a see-saw was included in an effort to assist participants select the most appropriate answer on a five point scale as seen in Figure 10.

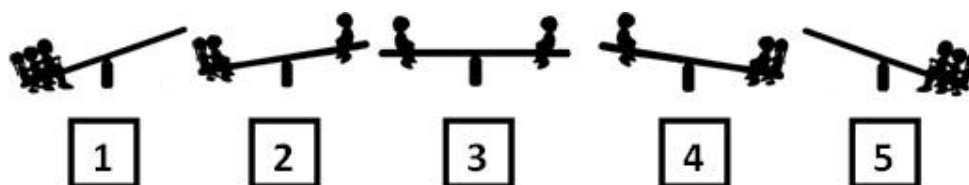


Figure 10: Five point scale questionnaire response.

In this study there may be further issues to address with respect to the quantitative data collection tool. The researcher has indicated their concerns regarding the wording of questionnaire items in consideration of their use with youth participants. While individuals appeared to have a good understanding of the questions used, the more general issue of the measurement of psychometric variables in youth has been similarly highlighted in previous studies (Everhart & Fiese, 2009; Harter & Pike, 1984). Common concerns raised have surrounded the ability of individuals up to the age of ten years to describe their feelings, thoughts and emotions in quantitative terms (Harter & Pike, 1984).

With regard to the scaling of the questionnaire, adjustments could have been made to the way in which the see saw was arranged in order to better reflect participants numeric responses. Instead of the questionnaire design of a five scale question response, a two, zero, two scale may have been more effective when used with participants of this age group (Figure 11). Alternatively the numbers could have been removed altogether (Figure 12). This is a suggestion which has been similarly made in feedback from coaches and supported through the endorsement of the use of pictorial references with the specific age group involved in this study (Everhart & Fiese, 2009; Harter & Pike, 1984). With this in mind, caution should be made when generalising from the quantitative findings in this study.

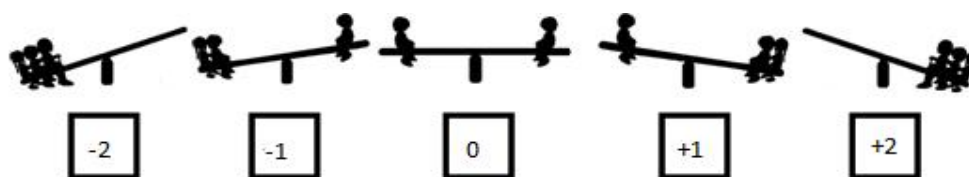


Figure 11: Five scale question response (numbered 2-0-2).



Figure 12: Five scale question response (without numbers).

Limitations

Several limitations exist in this study which require acknowledgement.

- Sample size

As anticipated in Chapter one: Introduction, a limitation of this study was the small sample size. Ideally sample sizes would have been larger and would have been balanced between the three groups; netball, V-ball and both sports. As a result of small sample sizes only a limited number of analyses were able to be conducted. Caution should therefore be taken when considering the meanings of these results. Furthermore, given that the sample was limited to adolescence, results may not apply to younger and older participants of netball and V-ball.

In order to increase the understanding of individuals' perceptions of self-satisfaction and team cohesion future research could extend this study by recruiting a larger sample size, inclusive of participants of traditional and modified games, of varying sporting codes. Moreover, due to the cultural diversity of the New Zealand population, in future research considerations could be given to recruiting youth from varied ethnic groups and geographical locations to improve the usefulness of findings.

- Questionnaire design

Both the YSEQ (Eys et al., 2009a) and the BPNS (Baard et al., 2004) have not been specifically validated for use with this particular age group. On-going use, review and adaptation of these questionnaires may assist in ensuring validity and reliability exists when used with this target population. As consistencies were acknowledged following the researcher's qualitative discussions with participants, it appears that individuals had an accurate understanding of the questions posed. While efforts were made to clarify any confusion through the use of pictorial references and through opportunities for questions to be asked, participants did not appear to require clarification.

- Researcher effect

Similar to that of the Hawthorn Effect (Gall, Gall & Borg, 2007), due to the nature of this study participants were aware of their involvement in research. It is therefore important to acknowledge that participants may have provided responses with more motivation and interest due to the fact that they were involved in a study than they may have under usual circumstances (Gall et al., 2007). As a result it is unclear whether or not question responses were provided genuinely, in a manner consistent with participant's perceived expectations of the researcher (for example, eagerness to please) or due to the novelty of involvement. To avoid participants perceiving any researcher expectations age appropriate language was used, appropriate dress to the sporting context was worn and efforts were made to create an environment of rapport and comfort. Despite these efforts researcher effect may have placed limitations on the validity of qualitative data.

- Techniques of participant recruitment

As mentioned in Chapter three: Methodology, the process of participant recruitment used was purposive sampling (Mutch, 2005; Yin, 2011). The use of this process appeared to have been a limitation as the individuals who volunteered to participate in data collection may have been those who possessed increased confidence, or who anticipated involvement to be exciting. As a result findings may not represent the perceptions of all youth participants. In future studies of this kind the use of random sampling (Mutch, 2005) may provide more useful results.

CONCLUSION

This section presents the key findings of this study and highlights future directions for research of this nature. In the final section of this chapter the researcher's final comments are presented.

The key findings were:

The effect of game structure on the fun experienced by youth participants'.

Participant perceptions have identified netball as a highly structured game. This level of structure appears to have had a restrictive effect on participants' perceptions of fun. It was the extent of the rules of the game and strict positional boundaries which were enforced which participants identified as main causes of the intermittent and stop/start nature of the game. These characteristics were found to limit participants' movement and to reinforce the perception that the netball environment was one of considerable control. The high game structure which was identified in netball was also indicated to lead to perceptions of boredom, emphasised by the fact that players were often not engaged in the game. As a result of these factors players had a heightened awareness of the external environment which, when negative, had a detrimental effect on the fun experienced.

Comparatively, V-ball participants explained the game as being less highly structured which was identified as a positive influence on their unanimous perceptions of fun. These perceptions appeared to be supported by the game modifications implemented in V-ball's game design. Moreover, the decreased boundary restrictions in V-ball were highlighted by participants as a contributing factor to the increased movement experienced in what was considered a free flowing game. Alongside the increased game flow it appears as if the smaller team sizes in V-ball provided participants with increased chances for ball handling and game engagement which subsequently resulted in more developmental opportunities.

An additional aspect of game structure which was identified to affect the fun experienced by participants was whether or not positional rotation has been implemented. In netball, where positional rotation was not implemented, players expressed their concerns over placement in

substitution roles. In consideration of the developmental needs of youth and their identified desire for active participation these concerns are of importance.

When netball participants did receive playing time, in their favoured positions, the satisfaction of their need for competence was highlighted. For some however there was a perceived need to prove their competence over that of their teammates in order to gain playing time at all. It was acknowledged by participants that without playing time their game skills and understanding may not improve.

By comparison, the implementation of positional rotation in V-ball resulted in participants perceiving less pressure (as there was no need to prove their competence) and experiencing increased social interaction with wider ranges of teammates. Moreover it was within the V-ball environment of decreased game structure where increased game speed, opportunities for decision-making and subsequent development appears to have been enhanced. V-ball players were also less concerned over the extent of their abilities and if these did, or did not, meet the expectations of others. Furthermore, positional rotation was identified as a direct source of fun for participants where increased learning and engagement also occurred due to increased exposure to the varying roles and responsibilities of each position. In order for fun to be experienced, alongside the aforementioned outcomes, these findings lend support to the implementation of non-highly structured games which include relevant modifications specific to members of youth sport.

The presence of external regulation (from significant others) as a contributing factor to orientations of extrinsic motivation.

Evidence has suggested that within netball environments, players perceived various aspects of their participation to be externally regulated. As a result participants held substantial perceptions of pressure, were concerned about the outcomes of their performance and displayed orientations of extrinsic motivation. Interestingly, netball players did not perceive this regulation negatively. While external regulation was not a favoured aspect of the game, players acknowledged, accepted

and expected it to exist. Of note was the involvement of players' parents in netball which, for many, appeared to have a considerable influence over the pressure which individuals perceived.

A contrasting extent of regulation was identified to exist in V-ball. Players indicated that pressure was rarely perceived and while their parents were present they rarely had an effect on individual's involvement in the game. As a result, participants appeared to experience increased game engagement and decreased concern over the external environment. In V-ball it was also indicated that players had orientations of intrinsic motivation, were less hesitant about trying new things in varied roles and were not aware of, nor concerned about, other's expectations.

These findings have indicated that when youth participants are given the freedom to be involved in sport without perceiving pressure or regulation to do so, increased development is able to occur. It was in these environments that individuals expressed their positive social experiences, increased engagement in the game and appeared excited about continued participation. Moreover, it appears that without experiencing external regulation or perceiving pressure to win participants in youth sport were more likely to play the game for intrinsic reasons. As a result players had positive experiences in V-ball with regard to learning, development and social interaction. These findings lead to the suggestion that importance should be placed on the development of intrinsic motivation in participants of youth sport in highly engaging game environments. These efforts appear likely to be supported when positive behaviours are encouraged on-court and from those on the side line.

Winning orientations negative effect on participants' perceptions of team cohesion.

Findings have indicated that when youth perceived an emphasis to be placed on winning as an imperative outcome of their involvement in sport their ability (both individually and as a team) to build both task and social cohesion diminished. The desire of netball participants to win indicated a common goal was shared between team members however rivalry and negative communication appeared to be commonly experienced as a result. It was apparent that when individuals viewed winning as a pivotal outcome of their participation in sport, importance was detracted from their skill development and from the occurrence of social interaction. These findings were reinforced by

individuals' descriptions of a perceived threat that decreased playing time, through allocation to substitution roles, may occur due to others perceiving their lack of competence.

A comparative outcome was apparent in V-ball however where players were not orientated towards winning and did not make reference to score based game outcomes. Instead, V-ball players appeared to place importance on the social aspects of the game, on learning new things and having fun in the game context.

These findings have highlighted the negative effect of winning orientations in youth sport and the resulting effects on individuals' ability to perceive both task and social cohesion in team environments. These findings have also highlighted the negative effects of these orientations on individuals' concern with regard to their competence and amount of playing time received as a consequence. In environments where winning orientations existed and success was measured by wins or losses on the scoreboard, it was clear that individuals' concerns had subsequent effects on the communication and social climates experienced in team environments. For orientations of cohesion to be developed it appears that participation in youth sport should be encouraged as a vehicle for learning new skills and having positive experiences in an environment where effective team communication, less concern over competencies and fun are likely outcomes.

Future directions

Due to the nature of research in sport the collection of quantitative data may typically occur in sporting environments as gyms, fields or court sides. In future studies, youth participants may benefit from questionnaires being administered in quiet, low-stimulus environments. This may serve to reduce inattention and distractibility, thereby enabling youth to more effectively engage in the data-gathering process.

Moreover, when utilising questionnaires with participants of this age group in future research it may be of benefit for simpler wording to be included. A questionnaire which is shorter in length

may also be beneficial to ensure youth participants are able to maintain optimal concentration throughout its completion.

As findings of this study have indicated differences between the themes which emerged from both quantitative and qualitative data analysis, the strengths of data triangulation have been highlighted. As a result the researcher would support the use of triangulation in future studies of this nature.

Final statement

This study has compared perceptions of self-satisfaction and team cohesion experienced by 11-12 year old participants of netball, a modified netball game (V-ball) or both games. Three main themes emerged from this study which the researcher encourages to be acknowledged in the future development of youth sport. These findings may also be of use in consideration of the implementation of modified games with youth participants in other sporting codes. These findings indicate that V-ball is a suitable vehicle for the development of youth participants across social, emotional, intellectual and physical domains. V-ball has also been identified as a game which is well suited to the intrinsically motivated orientations of youth. It is hoped that participation in V-ball would provide individuals with a wide range of developmental opportunities and positive sporting experiences during youth which would encourage and support their on-going participation to more structured and competitive netball programmes in the future.

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LIST OF APPENDICES

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Appendix A: Facets of Athlete Satisfaction Based on Outcomes and Processes

(source: Chellandurai & Riemer, 1997, p. 140).

Task facets of athlete satisfaction			
Outcomes		Processes	
Individual	Team	Individual	Team
Performance	Performance	Ability utilization	Strategy selection
Personal goal attainment	Team goal attainment	Training and instruction	Mobilization
Performance improvement	Performance improvement	Positive feedback	Deployment
Personal growth	Team maturity	Personal inputs	Practice
Task role	Group integration	Team contribution	Competition tactics
Personal immersion		Recognition	Equitable treatment
		Compensation	Ethics
		Family support	Team effort
			Coordination
			Facilities
			Budget
			Ancillary support
			Community support
			Loyalty support
			Decision participation
Social facets of athlete satisfaction			
Outcomes		Processes	
Individual	Team	Individual	Team
Belongingness	Interpersonal	Social support	N/A
Friendship	harmony	Loyalty support	
Role			

Appendix B: Interview schedule

1. When did you play your first game of netball/V-ball? What do you remember about that game?
2. Why do you play netball/V-ball now?
3. Apart from netball/V-ball do you have other hobbies/sports? (If many) Which is the one you do the most? Why do you play/do this?
4. If someone was new to netball/V-ball what is the first thing you would tell them about the game? Why is that?

Self-satisfaction

5. Give yourself a score out of 10 (10 being the best, 0 the least) for how much you enjoy netball/V-ball. Why did you score a? What could make this a 10?
6. What do you like most about netball/V-ball? Why is that?
7. What do you like least about netball/V-ball? Why is that?
8. How do you feel about rotating positions? Why is that?
9. Give yourself a score out of 10 for how good you feel your skills are in netball/V-ball? What would make this a 10?
10. Which position do you play the most (netball)/like playing the most (V-ball)? Why is that?
11. (Netball) Are there other positions you would like to play? Why is that?
12. Do you feel like you learn new skills playing netball/V-ball? How does that make you feel?
13. Give yourself a score out of 10 for how much you feel you can be yourself when you play netball/V-ball? What would make this a 10?

Cohesion

14. How friendly do you think your netball/V-ball team is out of 10? (10 being extremely friendly) Why did you choose? What would make this a 10?
15. Out of 10 how well do you think your (netball/V-ball) team work together? Why did you score a? What would make this a 10?
16. Does everyone on your team want to achieve your team goals? (How do you know this?)
17. Do other players talk to you during a netball/V-ball game? What do they say?
18. (if yes to above) Out of 10, score how much you understand what your team mates are saying to you? Why did you score....? How could this become a 10? Is it useful?
19. Does your coach talk to you during netball/V-ball games? If yes- out of 10; score how well you understand what they say. Why did you score? What could make this a 10? If no- why do you think that is? Is it useful?
20. Do you and your team mates spend time together outside of netball/V-ball? (If so) Do you hope to keep doing this once the season ends? Why is this?
21. Do you want to play netball/V-ball next season? Why/Why not?

Appendix C: University of Canterbury Human Ethics Committee approval letter



HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2011/73

5 September 2011

Sian Clancy
School of Sciences & Physical Education
UNIVERSITY OF CANTERBURY

Dear Sian

The Human Ethics Committee advises that your research proposal "Player perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 1 September 2011.

Best wishes for your project.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Michael Grimshaw'.

Michael Grimshaw
Chair
University of Canterbury Human Ethics Committee

Appendix D: Parent/guardian Information Sheet

27 July, 2011



Department of Physical Education

Player Perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

Parent/guardian Information Sheet

Hello, my name is Sian Clancy and I am a Masters student at the University of Canterbury. I invite your child to participate in the above study to compare participant perceptions of self-satisfaction and team cohesion in netball, V-ball or both games. Additionally to participation in the questionnaire I will be selecting 2 to 3 consenting players from each category (netball, V-ball or both games) who will be invited to participate in an interview. The interview is to find out about the participants perceptions of self-satisfaction and team cohesion in netball, V-ball or both games.

The aim of this research is to determine and compare the similarities and differences of player perceptions of team cohesion and player satisfaction in their involvement in netball, V-ball or both games. Results of this research will be provided to netball development personnel to determine how to provide experiences which enhance player satisfaction and therefore encourage life-long participation. It is hoped there may also be a scholarly publication of this research by way of research journal article.

The reason that your child has been invited to participate is because he or she plays netball, V-ball or both games for a school or club with a minimum of two years experience in one of these categories.

The interview participants will be interviewed at the Whangarei Netball clubrooms. If a parent/guardian would like to attend to observe, you are more than welcome to do so. We would ask that you do not help them in answering the interview questions. Questions will not require overly detailed or intimate answers and will not seek any opinions from players regarding coaches, parents/guardians and/or other players. The information sought will be restricted to game-play experiences which are specific to self-satisfaction and team cohesion.

The benefits of this research will be to inform netball coaches and netball development personnel about player's preferences and also the outcome of which sport has greater player satisfaction and more cohesion.

This research does not include any risks or discomforts for your children. The interview will be conducted at the child's convenience. This interview will be audio recorded and transcribed by the main researcher. The results of which will be seen by the researcher and research supervisors, who have all been vetted for child protection.

Your child's name, the club/school, coach and parents/caregivers will all be unidentifiable. We will not even ask your name. All participants will remain anonymous.

Consent forms for this research will be locked in the Project Supervisor's office filing cabinet.

There will be no cost in your child's participation in this research and only prescheduled training times and interview opportunities will be used when data collecting.

We appreciate your consideration of either accepting or not accepting this invitation as soon as possible. The deadline for your response will be one week after you receive the consent form.

If you and your child agree to participate in this research, please fill in the consent form at the end of this information sheet, sign it and please return. Your child's consent form (also attached) will need completion also.

Specific feedback will not be provided to your child or team as the research involves a number of participants however if you would like to know the final results, please contact me and I will be able to provide you a copy.

Should you have any concerns about this research please contact the Project Supervisor-Nick Draper via email: nick.draper@canterbury.ac.nz or Sian Clancy: sian.clancy@p.g.canterbury.ac.nz.

Thank you for your time,

Sian Clancy.



27 July, 2011

Department of Physical Education

Player Perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

Parent/Guardian Consent Form

I have read and understood the information provided about the above-named project. On this basis I allow my child to participate in the project, and I consent to publication of project results, understanding that anonymity will be maintained.

I understand that the anonymous project results will form part of the Master's Thesis for Sian Clancy and may be published in a journal or other publication and would be available publicly via the UC library database.

I have had an opportunity to ask questions and to have them answered.

I understand that I may withdraw my child from participation in this project at any stage prior to the completion of data collection, without being disadvantaged in any way.

If my child and/or I withdraw from participation in this research I understand that all relevant information will be withdrawn also.

I understand that my child's participation in this research is not in part of credit or assessment for any course.

I agree to my child participating in this research.

I can contact the Project Supervisor, Nick Draper via email: nick.draper@canterbury.ac.nz or the Researcher, Sian Clancy: sian.clancy@p.g.canterbury.ac.nz.

NAME (please print): í .

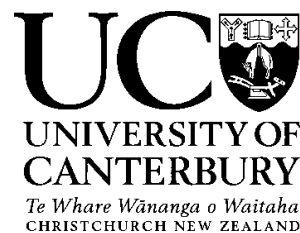
Signature:

Childs name:.....

Date:

27 July, 2011

Department of Physical Education



Player Perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

Information sheet and assent form for children

(Parents/caregivers please read to children)

This form will be kept for a period of 6 years

Hello-my name is Sian.

I would like to ask you to fill in a questionnaire about what you think of netball, V-ball or both games. I am trying to see what you really like about each sport and how your team work together.

Please circle **YES** if you would like to take part in the questionnaire.

Please circle **NO** if you do not want to do this.

Please circle **MAYBE** if you are not sure.

If you cannot decide that is fine, you can ask the researcher any questions you might have or talk to your coach or your parents/caregivers and let them know when/if you want to join in.

Let me know how you feel about this by colouring in one of these words -

HAPPY FINE

NOT SURE

UNEASY

If you are not sure or uneasy come and talk to the researcher about it or ask your coach or your parents/caregivers about this.

Thank you for completing this form ó will you sign here if you feel that you understand what the project is about and give this form back to your coach tomorrow please.

(signature)

.....

(Date)

.....

If you have any concerns about this research you can contact the project supervisor Nick Draper via email nick.draper@canterbury.ac.nz or the researcher Sian Clancy sian.clancy@p.g.canterbury.ac.nz.

Thank you,

Sian Clancy.

Appendix G: Questionnaire



Player perceptions of self satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

- Please circle which box shows how many years you have been playing the sport listed:

Netball: 1 year 2 years 3 years 4 years or more

V-ball: 1 year 2 years 3 years 4 years or more

- Please circle which applies to you. Are you a:

Boy? Girl?













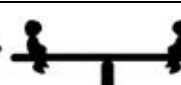




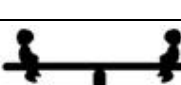




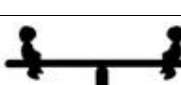








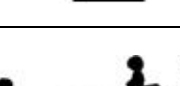
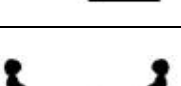


- How old are you?





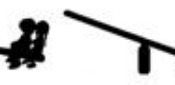









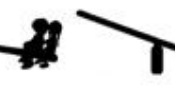


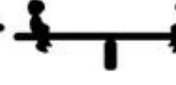
















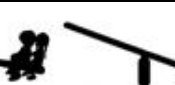




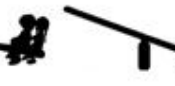
_____ years old
















Sample question:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
1. I feel ready to complete the questionnaire					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



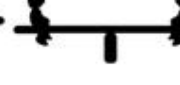




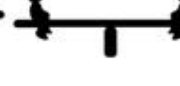

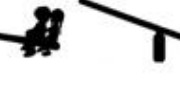


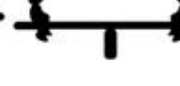

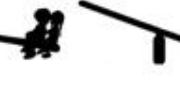


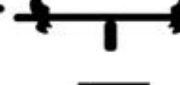




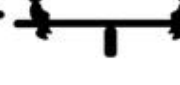

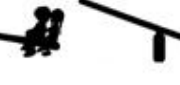


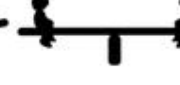






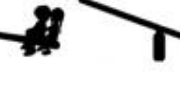
The following questions ask about your feelings towards **your team**. Please **CIRCLE** a number from 1 to 5 to show how much you agree with each statement.





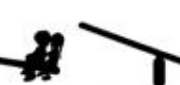


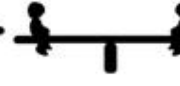




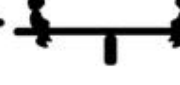




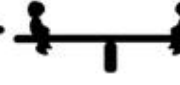




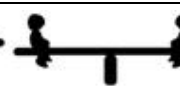

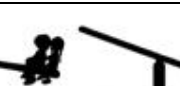




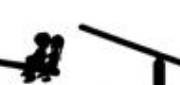





	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
1. We all want to achieve our team's goals	 1	 2	 3	 4	 5
2. I ask my teammates to do things with me	 1	 2	 3	 4	 5
3. As a team we agree about things	 1	 2	 3	 4	 5
4. Some of my best friends are on this team	 1	 2	 3	 4	 5
5. I like the way we work together as a team	 1	 2	 3	 4	 5
6. I <u>do not</u> get along with my teammates	 1	 2	 3	 4	 5
7. We spend time together when we can	 1	 2	 3	 4	 5





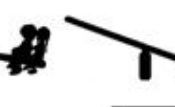




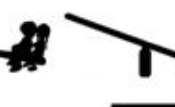




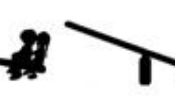


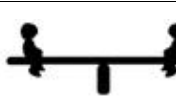

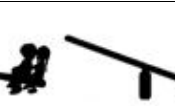


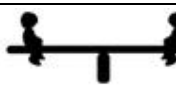
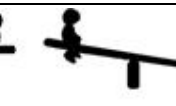
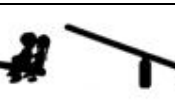


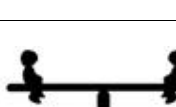


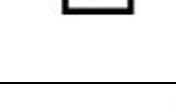

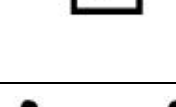
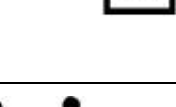
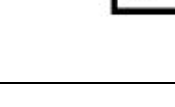
	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
8. As a team we are close	 1	 2	 3	 4	 5
9. I contact my teammates often (phone, text message, internet)	 1	 2	 3	 4	 5
10. This team lets me improve my own performance	 1	 2	 3	 4	 5
11. I spend time with my teammates	 1	 2	 3	 4	 5
12. Our team <u>does not</u> work well together	 1	 2	 3	 4	 5
13. I am going to keep in contact with my teammates after the season ends	 1	 2	 3	 4	 5
14. I am happy with how much my team want to win	 1	 2	 3	 4	 5
15. We stick together outside of training/playing	 1	 2	 3	 4	 5

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
16. I have the same approach to playing as my teammates	 1	 2	 3	 4	 5
17. We contact each other often (phone, text message, internet)	 1	 2	 3	 4	 5
18. We like the way we work together as a team	 1	 2	 3	 4	 5

The following questions ask about your feelings towards **your sport**. Please **CIRCLE** a number from 1 to 5 to show how much you agree with each statement.

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
19. I feel like I have input into how we play netball/v-ball	 1	 2	 3	 4	 5
20. I really like the people I play netball/v-ball with	 1	 2	 3	 4	 5
21. I do not feel very skilful when I am playing netball/v-ball	 1	 2	 3	 4	 5
22. Other players tell me I am good at netball/v-ball	 1	 2	 3	 4	 5
23. I feel pressured playing netball/v-ball	 1	 2	 3	 4	 5
24. I get along with people at netball/v-ball	 1	 2	 3	 4	 5
25. I keep to myself when playing netball/v-ball	 1	 2	 3	 4	 5

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
26. I can express my ideas and opinions when playing netball/v-ball	 1	 2	 3	 4	 5
27. The people I play netball/v-ball with are my friends	 1	 2	 3	 4	 5
28. I have been able to learn interesting new skills playing netball/v-ball	 1	 2	 3	 4	 5
29. When I am playing netball/v-ball, I have to do what I am told	 1	 2	 3	 4	 5
30. Most days I feel successful from playing netball/v-ball	 1	 2	 3	 4	 5
31. My feelings are considered when playing netball/v-ball	 1	 2	 3	 4	 5
32. Playing netball/v-ball I do not get much of a chance to show how good I am	 1	 2	 3	 4	 5

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
33. People at netball/v-ball care about me	 1	 2	 3	 4	 5
34. There are not many people at netball/v-ball that I am close to	 1	 2	 3	 4	 5
35. I feel like I can be myself when playing netball/v-ball	 1	 2	 3	 4	 5
36. The people I play netball/v-ball with do not seem to like me much	 1	 2	 3	 4	 5
37. When I am playing netball/v-ball I do not feel very capable	 1	 2	 3	 4	 5
38. There is not much opportunity for me to decide for myself how to play netball/v-ball	 1	 2	 3	 4	 5
39. People at netball/v-ball are pretty friendly towards me	 1	 2	 3	 4	 5



27 July, 2011

Department of Physical Education

Player Perceptions of self-satisfaction and team cohesion in netball, a modified netball game (V-ball) or both games.

Parent/Guardian Consent Form

I have read and understood the information provided about the above-named project. On this basis I allow my child to participate in the project, and I consent to publication of project results, understanding that anonymity will be maintained.

I understand that the anonymous project results will form part of the Master's Thesis for Sian Clancy and may be published in a journal or other publication and would be available publically via the UC library database.

I have had an opportunity to ask questions and to have them answered.

I understand that notes will be taken during the interviews and they will be audio taped, transcribed and used in the report discussion.

I understand that my child's name will not be recorded next to comments made in the interview and will not be used in any part of this research project's data, results, discussions or final report.

I understand that I may withdraw my child from participation in this project at any stage prior to the completion of data collection, without being disadvantaged in any way.

If my child and/or I withdraw from participation in this research I understand that all relevant information including audio recordings, transcripts or parts thereof, will be withdrawn also.

I understand that my child's participation in this research is not in part of credit or assessment for any course.

I agree to my child participating in this research.

I can contact the Project Supervisor, Nick Draper via email: nick.draper@canterbury.ac.nz or the Researcher, Sian Clancy: sian.clancy@p.g.canterbury.ac.nz.

NAME (please print): í .

Signature:

Childs name:.....

Date:

27 July, 2011

Department of Physical Education



**Player Perceptions of self-satisfaction and team cohesion in netball, a modified netball game
(V-ball) or both games.**

Information sheet and assent form for children

(Parents/caregivers please read to children)

This form will be kept for a period of 6 years

Hello-my name is Sian.

I would like to interview you about what you think of netball, V-ball or both games. I am trying to see what you really like about each sport and how your team work together.

I will only perform one interview and it could last up to one hour.

Please circle **YES** if you would like to take part in the interview.

Please circle **NO** if you do not want to do this.

Please circle **MAYBE** if you are not sure.

If you cannot decide that is fine, you can ask the researcher any questions you might have or talk to your coach or your parents/caregivers and let them know when/if you want to join in.

I hope we can do this together. It will be great to meet you and you will know who I am because I will be wearing a badge with my name on, Sian, when I am at the court.

If you would like, your parent/caregiver can stay in the interview room with us. You can talk to them if you wish, but we will only take your answers. We will not be using your name in this research. You can ask us about our work whenever you want to. Let us know how you feel about this by colouring in one of these words -

HAPPY FINE

NOT SURE

UNEASY

If you are not sure or uneasy come and talk to the researcher, your coach or your parents/caregivers about this.

Thank you for completing this form ó will you sign here if you feel that you understand what the project is about and give this form back to your coach tomorrow please.

(signature).....

(Date).....

If you have any concerns about this research you can contact the project supervisor Nick Draper via email nick.draper@canterbury.ac.nz or the researcher Sian Clancy sian.clancy@p.g.canterbury.ac.nz.

Thank you,

Sian Clancy.

Appendix J: Whangarei letter of consent

From: Sue Cresswell [mailto:whangareinetball@extra.co.nz]

Sent: Thu 7/5/2812 2:33 p.m.

To: Sian Clancy

Subject: RE: request for consent

Hi Sian

Well done!

Yes you may use Whangarei Netball Centre's name in this thesis.

I look forward to reading the results!

Good Luck

Sue Cresswell

Netball Co-ordinator

Whangarei Netball Centre Inc

Ph (89) 4371958

Fax (89) 4371958

Mobile 827 437 1952

whangareinetball@extra.co.nz

www.whangareinetball.co.nz

Report

group		<u>yearsnetball</u>	<u>yearsVball</u>	gender	age	Task	Social	Autonomy	Relate	Competence
netball	Mean	3.9643	1.2857	2.0000	11.7679	4.4152	4.0848	3.8022	4.3558	4.3846
	N	28	28	28	28	28	28	26	26	26
	Std.	1.37389	.65868	.00000	.91775	.54226	.61242	.56435	.56755	.60327
	Deviation									
<u>Vball</u>	Mean	.6250	2.1250	1.7500	12.3750	3.4375	3.4844	3.1964	3.7604	3.6458
	N	8	8	8	8	8	8	8	8	8
	Std.	.51755	1.24642	.46291	.51755	1.20823	1.07204	.60579	.88353	.87938
	Deviation									
<u>NetballVball</u>	Mean	2.5185	2.1111	1.9259	11.8519	4.0556	4.0370	3.4947	3.8739	3.8086
	N	27	27	27	27	27	27	27	27	27
	Std.	1.34079	1.18754	.26688	.86397	.78701	.64284	.60574	.68311	.77308
	Deviation									
Total	Mean	2.9206	1.7460	1.9365	11.8810	4.1369	3.9881	3.5867	4.0644	4.0328
	N	63	63	63	63	63	63	61	61	51
	Std.	1.68773	1.06208	.24580	.86469	.80845	.71021	.61544	.70210	.77269
	Deviation									

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
yearsnetball	Between Groups	77.023	2	38.512	23.204	.000
	Within Groups	99.580	60	1.660		
	Total	176.603	62			
yearsVball	Between Groups	10.681	2	5.340	5.407	.007
	Within Groups	59.256	60	.988		
	Total	69.937	62			
Gender	Between Groups	.394	2	.197	3.528	.036
	Within Groups	3.352	60	.056		
	Total	3.746	62			
Age	Between Groups	2.334	2	1.167	1.590	.212
	Within Groups	44.023	60	.734		
	Total	46.357	62			
Task	Between Groups	6.260	2	3.130	5.481	.007
	Within Groups	34.262	60	.571		
	Total	40.522	62			
Social	Between Groups	2.357	2	1.178	2.445	.095
	Within Groups	28.916	60	.482		
	Total	31.272	62			
Autonomy	Between Groups	2.654	2	1.327	3.835	.027
	Within Groups	20.071	58	.346		
	Total	22.726	60			
Relate	Between Groups	3.926	2	1.963	4.439	.016
	Within Groups	25.650	58	.442		
	Total	29.576	60			
Competence	Between Groups	5.773	2	2.886	5.571	.006
	Within Groups	30.051	58	.518		
	Total	35.823	60			

Multiple Comparisons

LSD

Dependent Variable	(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
yearsnetball	netball	Vball	3.33929*	.51646	.000	2.3062	4.3724
		NetballVball	1.44577*	.34748	.000	.7507	2.1408
	Vball	netball	-3.33929*	.51646	.000	-4.3724	-2.3062
		NetballVball	-1.89352*	.51858	.001	-2.9308	-.8562
	NetballVball	netball	-1.44577*	.34748	.000	-2.1408	-.7507
		Vball	1.89352*	.51858	.001	.8562	2.9308
yearsVball	netball	Vball	-.83929*	.39840	.039	-1.6362	-.0424
		NetballVball	-.82540*	.26805	.003	-1.3616	-.2892
	Vball	netball	.83929*	.39840	.039	.0424	1.6362
		NetballVball	.01389	.40003	.972	-.7863	.8141
	NetballVball	netball	.82540*	.26805	.003	.2892	1.3616
		Vball	-.01389	.40003	.972	-.8141	.7863
gender	netball	Vball	.25000*	.09475	.011	.0605	.4395
		NetballVball	.07407	.06375	.250	-.0534	.2016
	Vball	netball	-.25000*	.09475	.011	-.4395	-.0605
		NetballVball	-.17593	.09514	.069	-.3662	.0144

		NetballVball	netball	-.07407	.06375	.250	-.2016	.0534
			Vball	.17593	.09514	.069	-.0144	.3662
age	netball	Vball	-.60714	.34339	.082	-1.2940	.0797	
		NetballVball	-.08399	.23104	.717	-.5461	.3782	
	Vball	netball	.60714	.34339	.082	-.0797	1.2940	
		NetballVball	.52315	.34481	.134	-.1666	1.2129	
	NetballVball	netball	.08399	.23104	.717	-.3782	.5461	
		Vball	-.52315	.34481	.134	-1.2129	.1666	
Task	netball	Vball	.97768	.30294	.002	.3717	1.5837	
		NetballVball	.35962	.20382	.083	-.0481	.7673	
	Vball	netball	-.97768	.30294	.002	-1.5837	-.3717	
		NetballVball	-.61806	.30419	.047	-1.2265	-.0096	
	NetballVball	netball	-.35962	.20382	.083	-.7673	.0481	
		Vball	.61806	.30419	.047	.0096	1.2265	

Social	netball	<u>Vball</u>	.60045*	.27830	.035	.0438	1.1571	
		<u>NetballVball</u>	.04778	.18725	.799	-.3268	.4223	
	<u>Vball</u>	netball	-.60045*	.27830	.035	-1.1571	-.0438	
		<u>NetballVball</u>	-.55266	.27945	.053	-1.1116	.0063	
	<u>NetballVball</u>	netball	-.04778	.18725	.799	-.4223	.3268	
		<u>Vball</u>	.55266	.27945	.053	-.0063	1.1116	
Autonomy	netball	<u>Vball</u>	.60577*	.23784	.014	.1297	1.0819	
		<u>NetballVball</u>	.30749	.16164	.062	-.0161	.6310	
	<u>Vball</u>	netball	-.60577*	.23784	.014	-1.0819	-.1297	
		<u>NetballVball</u>	-.29828	.23680	.213	-.7723	.1757	
	<u>NetballVball</u>	netball	-.30749	.16164	.062	-.6310	.0161	
		<u>Vball</u>	.29828	.23680	.213	-.1757	.7723	
Relate	netball	<u>Vball</u>	.59535*	.26887	.031	.0572	1.1335	
		<u>NetballVball</u>	.48187	.18273	.011	.1161	.8476	
	<u>Vball</u>	netball	-.59535*	.26887	.031	-1.1335	-.0572	
		<u>NetballVball</u>	-.11348	.26769	.673	-.6493	.4224	
	<u>NetballVball</u>	netball	-.48187	.18273	.011	-.8476	-.1161	
		<u>Vball</u>	.11348	.26769	.673	-.4224	.6493	
Competence	netball	<u>Vball</u>	.73878*	.29102	.014	.1562	1.3213	
		<u>NetballVball</u>	.57597	.19778	.005	.1801	.9719	
	<u>Vball</u>	netball	-.73878*	.29102	.014	-1.3213	-.1562	
		<u>NetballVball</u>	-.16281	.28975	.576	-.7428	.4172	
		<u>NetballVball</u>	netball	-.57597	.19778	.005	-.9719	-.1801
		<u>Vball</u>	.16281	.28975	.576	-.4172	.7428	

*. The mean difference is significant at the 0.05 level.