Adult Attachment Styles and Personality Traits: Their Influence on Group Cohesion within Amateur Sports Teams

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Submitted in partial fulfilment of the requirement of the Bachelor of Arts degree (Psychology Specialization) at DBS School of Arts, Dublin.

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April 2013

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Acknowledgements

Many thanks to my supervisor, Dr. Chris Gibbons for his understanding and guidance throughout.

My gratitude goes out to all participants and sports clubs who took part in this study.

Also for continuous support throughout, my classmates, Sorcha and Karolina.

And finally to Caroline, for having the patience to live with me during my hibernation in the study, and for supporting me unequivocally throughout my studies.
Abstract

The aim of this study was to investigate the effect that personality type and attachment style have on group cohesion within amateur sports teams. Pen and paper questionnaires consisting of four published questionnaires were administered to participants (N=68), both male (N=52) and female (N=16) using a convenience sampling. Results found that there was no statistically significant relationship between attachment styles and the four subscales of group cohesiveness (ATGS, ATGT, GIS, GIT), some negative significant relationships between the personality type Psychoticism and ATGS, ATGT and GIS, and a positive significant relationship between the personality type Neuroticism and GIS. The study finds that personality type appears to be a better predictor of group cohesiveness within amateur sports teams.
1. Introduction

The aim of this research is to assess dimensions of adult attachment style and adult personality type and how they interact with perceptions of group cohesiveness in amateur sports teams. Following this introduction to the subject, a discussion on the ill-defined area of group cohesion will be followed by analysis of theory relating to adult attachment and personality.

Group cohesiveness has been defined as "the resultant forces which are acting on the members to stay in a group" (Festinger, 1950, p164). Lott & Lott (1965) observe group cohesiveness as the result of "the number and strength of mutual positive attitudes among members of a group"(p.259), identifying interpersonal attraction as a key factor in group cohesion. Recognising the role that social identity theory may also play in group cohesion, Hogg(1992) asserted that group cohesion is based upon individuals attractions to the group itself.

Central to this, complimentary personality characteristics have been suggested to be factors in the positive development of group cohesiveness (Evan & Jarvis, 1980; Rychlak, 1965; Schutz, 1958).

Bowlby defined attachment as a "lasting psychological connectedness between human beings" (1969, p. 194), determining that early bonds formed between children and their caregivers impact decisively upon future relationships and social interactions. Ainsworth et al. (1978) developed this theory, noting three distinct infant attachment styles that develop into adulthood - secure, anxious/ambivalent and avoidant. Smith, Murphy & Coates (1999) observed that adult attachment theory "may be able to shed light on the processes underlying people's identification with social groups" (p.94). Further research relating to adult attachment type within group contexts observed relationships between adult attachment
schemas and members perceptions of their groups environment (Harel, Shechtman, & Cutrona, 2011). More specifically, research on group cohesion has determined that member relationships to a group may apply to the framework of adult attachment styles (Hogg, 1992; Mullen & Cooper, 1994).

This research will be conducted with the aim of enhancing existing knowledge relating to group cohesiveness and its relationship with an individual's attachment style and distinct personality traits, more specifically, within the realm amateur sports in Ireland.

1.1 Group Cohesion

Group cohesion has been defined in a number of different ways by a number of different researchers, ranging from Festinger's (1950) description of cohesiveness as the summation of a number of factors that keep members in a group, to Carron (1982), who proposed that it was in fact a reflection of how a group sticks together to reach specific goals. Building on this task orientated approach, Goodman et al. (1987) defined it as a measure of how individuals commit to a given group task. Evans & Jarvis (1980) approached group cohesiveness from another angle, finding that most commonly, "member attraction to the group" (p.360) appeared to be associated with cohesiveness. Mudrack (1989) noted that "after over three decades of research, a satisfactory definition of group cohesiveness has yet to gain general acceptance" (p. 773).

This confusion regarding the construct of cohesion led to Carron et al. (1985) to propose a multidimensional theory of cohesion. They asserted that cohesion is made up of two definitive constructs, that of attraction to the group (ATG), referring to an individual's involvement with and in the group, and group integration (GI), which concerns the individuals perceptions of the group as a whole. These individual constructs are made up of both social and task based factors, that "task cohesion exists when the group coheres around
the task it was organized to perform while social cohesion exists when the group coheres around social (non-task) functions" (Carron et al., 1985, p. 247-248). This resulted in the formation of a four factor model of cohesion, made up of attraction to the group task (ATGT), attraction to the group social (ATGS), group integration task (GIT), and group integration social (GIS).

The breakdown into individual constructs of social cohesion and task cohesion allow an exploration into the origination of the development of each, with a focus on surface-level similarities, and deep-level similarities. Surface level similarities, defined by Harrison et al. (1998), as “overt, biological characteristics that are typically reflected in physical features” (p. 97), such as age or gender have been correlated to the development of interpersonal bonds in addition to cohesion, with Riordan & Shore (1997) finding that similarities in race and ethnicity had an impact on individuals attitudes in relation to work groups, and advancement opportunities. Jackson et al. (1991) found relationships between surface level differences and negative team functioning in the work place. Supporting this, research on the formation of close relationships by Triandis (1961) and Triandis & Davis (1965), found that surface-level similarities are an important factor during the initial formation of these relationships, taking precedent over so called deep-level similarities. These deep-level similarities are attributes and characteristics that are not necessarily outwardly communicated, or noted by others upon initial observation, such as personality, attitudes, beliefs and values (Harrison et al., 1998; Bell, 2007). These attitudes or beliefs are only revealed on closer verbally and non-verbally communications between individuals. Harrison & Sin (2005) made a simple, clear distinction between the two, with surface-level similarities being related to physical attributes, and deep-level similarities being related to psychological attributes. Harrison et al. (1998) found that both surface level and deep level similarities had effects on group cohesion, with groups comprising of individuals with surface level similarities reporting higher levels group
cohesion in initial stages than groups with a more diverse range of individuals. Over time, the
effect of surface-level similarities greatly diminished. Conversely, deep-level similarities
were found to have negligible effects on group cohesion in initial stages, but as the group
developed over time, deep-level similarities increasingly positively correlated with increased
group cohesion.

A brief discussion of social identity theory may allow an insight into the reasons for
these results. Social identification is observed to be the identification of others as being
members of a distinct category, such as gender, race or age categories as examples, and
placing one's own identity within that category (Tajfel, 1982, Van Dick et al., 2005). Self-
categorisation theory (Turner, 1984) built upon the framework of social identification theory,
proposing that the individual classifies individuals as similar or dissimilar according to
certain characteristics, and in turn are attracted by other individuals or groups that share these
characteristics. Work place studies have found that individuals place others into social
categories, with this categorisation sometimes in turn making inferences regarding
capabilities, skills and abilities of the individual due to the perceived membership of a
category. Byrne (1971) noted the similarity-attraction paradigm in which individuals actively
seek out others who share similarities with themselves, which in turn leads to an increase in
social interactions (Tsui et al., 1992). This increase in social integration and interaction due to
similarities between members invariably lead to increased communication (Muchinsky &
Monahan, 1987), which in turn improves motivation and satisfaction with the group (Van
Dick et al., 2005). From these findings, it follows that both surface-level similarities, and
deep-level similarities can be predictors of cohesiveness within groups, with Hobman et al.
(2003, 2004) correlating higher levels of cohesion within groups sharing similarities.
Furthermore, Harrison et al. (1998) noted that similarities in attitudes was associated with
higher levels of cohesion. Surface level similarities appear to offer the starting point for the
development of social bonds within groups. Following this initial attraction, deep-level similarities begin to take precedence within a group, appearing to have a greater influence on members when working towards a task, with Rokeach (1968), finding that members working on a task preferred working with those sharing some deep-level similarities rather than surface-level similarities. This collection of studies and theory appear to substantiate Carron et al.'s (1985) definition of cohesion as a multidimensional construct of both social cohesion and task cohesion, with both comprising of individual and group attractions (Carron et al., 2008).

1.2 Attachment

Bowlby (1969) observed that a bond between infant and caregiver is vitally important for the development of the infant. This bond between the infant and a primary attachment figure promotes the survival of the infant. Bowlby noted behaviours such as crying and searching that infants displayed to avoid separation or regain proximity to a missing figure. He proposed an attachment behavioural system, that had been gradually naturally designed through years of evolutionary development, that regulates the proximity of the infant to the primary attachment figure. The infant experiencing a sense of love and closeness from the caregiver will feel secure and confident to explore their environment and be sociable. The infant with a negative sense of proximity or attentiveness from the attachment figure will experience anxiety, leading to proximity seeking behaviours. Bowlby proposed that these behaviours could lead to experiences of despair of depression in the developing child. Using the strange situation technique, Ainsworth (1989) developed Bowlby's work, noting that the relationship between the infant and attachment figure comprises of a number of central factors, namely that the relationship is emotionally significant, involves proximity seeking, and is individual. From the sense of protection gained from the attachment, the infant is able to explore its environment safely and securely, and when threatened by danger or stressful...
situations is able to search for greater proximity with the attachment figure. While other motivations such as "felt security" (Sroufe & Waters, 1977) and maintenance of this security (Kobak, 1999) are important in attachment, the basis of it lies in its promotion of survival and engagement with others (Howe, 2005).

Ainsworth highlighted three types of infant attachment type, those who are secure, those who are anxious resistant, and those who are anxious avoidant. Children who display unhappiness or distress when separated from an attachment figure, but also display fast recovery from this distress when returned to the attachment figure are consider to have secure attachments (Ainsworth et al., 1978). Insecure attachment patterns have also been identified, namely those of anxious resistant and anxious avoidant. Ainsworth identified behaviours displayed by those with anxious resistant attachments as being somewhat fixated on their mothers, and as such not exploring their environment with the same freedom of those with secure attachments. Following separation from the mother, these infants displayed extreme distress followed by behaviours of anger and excessive proximity seeking on the return of the mother. Ainsworth noted that although the mothers of these infants did show affection from time to time, their parenting style was defined by unpredictable and insensitive behaviours (Ainsworth et al., 1978). Those with anxious avoidant insecure attachments showed a separate set of behaviours. These infants displayed little or no distress when left by their mother from short periods of time, and exhibited no discomfort when interacting with a stranger instead of their mother (Ainsworth et al., 1978). When reunited with their mother, these infants disregarded the mothers return, instead choosing to busy themselves with play. Mothers of these infants were observed to display considerably poor behaviours towards their children, avoiding intimacy and physical contact and withdrawal in times of distress. (Ainsworth et al., 1978; Grossmann & Grossmann, 1991).
The style of attachment experienced by the infant lays the foundation for the development of internal representations of the self, and of others. Both Bowlby (1982) and Ainsworth et. al (1978) argue that the infant gradually develops internal representations of the self based on early experiences with figures of attachment. These internal working models guide future behaviours in social experiences. Main (1995) proposed that children must develop differing strategies depending on their attachment type. This is due to the individual behaviours required for the child to perform to maintain an equilibrium of security and proximity from the attachment figure. This research offers an insight into the early influence that attachment style may have on the developing child, inferring that early on in life, attachment experiences will affect how individuals interact with others in future encounters.

George, Kaplan & Main (1996) explored this concept of internal representations within an adult sample using the Adult Attachment Interview. These adults were rated after discussion and reflection on attachment related subjects within their own lives. Those who appeared emotionally stable and who were comfortable with intimacy were rated as secure (Main, 1995). Those who had little or no recollection of their childhood, who used succinct responses to questions about their early experiences were noted as being avoidant or dismissive (Main, 1995). Those who displayed behaviours or gave responses that appeared to be fearful or angry, or who were overly concerned with their relationships were noted to be ambivalent or resistant. Finally, those who appeared to have ongoing difficulties with childhood trauma were noted as disorganised or unresolved. These adults were found to have difficulties in certain cognitive processing areas, such as speech and reasoning (Hesse, 1999).

Hazan and Shaver (1987) hypothesised that romantic adult relationships were in fact attachment processes similar to those experienced in childhood, contending that the attachment styles developed in childhood would carry forward into these adult relationships. They noted that each attachment style could be characterised by a number of distinct
characteristics. The individual in the secure attachment prototype has generally positive views of themselves, their partners and their relationships. These individuals report higher satisfaction with relationships and tend to be more comfortable with intimacy and independence in equal measures (Bartholomew, 1990; Feeney & Noller, 1990). Avoidant adults preferred high independence, low requirements for intimacy or affection, and often devoted excessive amounts of time to work (Feeney & Noller, 1990; Hazan & Shaver, 1990). Those termed ambivalent had high needs for intimacy and affection within relationships, accompanied by excessive feelings of jealousy towards their partners (Feeney & Noller, 1990).

Continuing from these developments, adult attachment schemas have been related to a group member's perception of their group climate. Individual members were found to have differing perceptions of their group climate depending on their attachment type, with those with high attachment anxiety perceiving high levels of avoidance and conflict within their group (Harel et al., 2011). Illing et al. (2011) found negative correlations between individual group members' discomfort with closeness and ratings of their group climate, and positive correlations between this characteristic of avoidance attachment and ratings of the group climate by other group members. Brennan et al. (1998) proposed that two specific attachment types, avoidant and anxious, are used as a basis for the development of the individuals' schemas of self when relating to others. Those scoring high in attachment anxiety display approval seeking behaviors from other group members while also fearing rejection alongside this. These individuals view others more negatively than those scoring high in attachment avoidance, who are more self-reliant due to hesitations in depending on others. Mallinckrodt & Chen (2004) also observed the affect of attachment on group perceptions, noting high levels of transference towards group members by those rating high in attachment avoidance. Lopez et al. (2002) found that individual differences such as attachment style
influence how well students were able to integrate and adapt in the transition to college life. Students with more secure attachment styles, those who have more trust in others and greater security in themselves, were best able to cope with the adjustment to college. Students with more insecure styles had difficulty in relationships, inconsistent self views, and greater difficulty adjusting to college life. Again, individuals with more secure attachment styles were more likely to seek out and to benefit from their relationships to others (Priel & Shamai, 1995, Rice et al., 1997). Conversely, Wei et al., (2005) found that personal attachment anxiety was predictive of loneliness and decreased ratings of social support in college students.

1.3 Personality

Personality has been defined as the “psychological qualities that contribute to an individual’s enduring and distinctive patterns of feeling, thinking, and behaving” (Cervone & Pervin, 2010, p.8). Central to the development of theory surrounding personality is the emergence of trait theory, stemming from Hippocrates' humoral theory, in which he proposed of the existence of four separate substances or 'humors', black bile, yellow bile, phlegm, and bile, within the individual. Hippocrates asserted that any imbalance in these humors would result in a number of different ailments or diseases. Traits are considered to be internal attributes that are relatively consistent in composition and duration, while remaining distinctive from other attributes or traits and generally demonstrating consistent responses across a population.

Using Hippocrates framework and factor analysis, Eysenck proposed that personality could be understood through across two separate traits or super-factors, that of extraversion-introversion, and secondly, that of neuroticism. The dimension of extraversion-introversion is one where each is opposed to the other, with high levels of one being directly related to low levels in the other. Ryckman (2008) noted extraversion as being made up of high levels of
sociability, talkativeness, and being outgoing, while introversion is characterised by being shy and reserved, focusing more inwardly than outwardly. Neuroticism is made up of characteristics such as insecurity, anxiety and emotional instability. Eysenck later added a third super-factor, Psychoticism, being made up of characteristics such as aggressiveness, insensitivity and lack of empathy (Ryckman, 2008).

“Personality has more direct and powerful effects on group processes than other composition variables typically studied (e.g. age, race, gender, and information distribution)” (Moynihan & Peterson, 2001, p. 328). The contention that personality traits influence social interactions (McCrae, 1996; Tett & Burnett, 2003) has led to a number of studies that appear to lend support to this. Judge et al. (2002) found that extroversion was linked to the emergence of leaders within groups, showing the influence that personality may have in a group setting. Within groups, Barrick et al. (1998) found that high average levels of extroversion and low neuroticism were consistent predictors of team effectiveness. More specific to group cohesion, Van Vienne & De Drau (2001), using Barrick et al.'s original sample in addition to two new samples, found that high levels of extraversion and low neuroticism were positively correlated to social cohesion, suggesting that higher levels within these traits allows for more integration on both a social and task based level, and conversely that lower levels of extraversion and higher levels of neuroticism may in turn effect the positive makeup of the cohesiveness of a group.

1.4 Present Study

The present study will be interested in measuring any associations between group cohesiveness and personality, attachment and happiness in amateur sports teams. Differences in gender and age will also be considered within these variables.
At present, the majority of research regarding the construct of group cohesion has taken place in a work group setting, with much emphasis placed on the output from group cohesion rather than the determinants. In addition, research into personality and attachment appears to look at group dynamics in the whole, with little research conducted into the effects of these variables on cohesion within the group. As this study is using individuals from amateur sports teams as its sample, it will attempt to bring new insights into the development of group cohesion, focusing mainly on personality style, attachment type and levels of happiness.

With this in mind, two general research questions have been drafted -

1. Does individual adult attachment type influence perceptions of group cohesiveness within amateur sports teams?

2. Do specific personality types also influence perceptions of group cohesiveness within amateur sports teams?

Following these research questions, a number of hypotheses have been devised -

Hypothesis 1 - Participants with secure adult attachment types will demonstrate above average perceptions of group cohesiveness.

Hypothesis 2 - Participants scoring high on neuroticism will demonstrate lower than average perceptions of team cohesiveness.

Hypothesis 3 - There will be gender differences within perceptions of team cohesiveness

Hypothesis 4 - There will be age differences in perceptions of team cohesiveness
2. Method

2.1 Participants

A total of sixty eight (N=68) respondents from a number of different amateur sports teams in Ireland participated in this study. Out of these participants, a total of fifty two were male (N=52, 76.5%) and sixteen were female (N=16, 23.5%). Participants ages ranged from 18-24 (N=14, 20.6%), 25-31 (N=33, 48.5%) and 32+ (N=21, 30.9%). Participation in this study was on a voluntary basis, with no incentives offered. All participants were aged 18 or above.

2.2 Design

This study implemented a cross-sectional survey design with a quantitative methodology. The criterion variable is team cohesiveness, with attachment style, personality style and happiness acting as predictor variables. The demographic variables of gender and age were also measured to determine any differences between sexes and age groups.

2.3 Materials

A questionnaire booklet comprising of four separate published questionnaires was administered to participants (Appendix 1). In addition to the published questionnaires, a section for the demographic variables of age and gender was devised. The first questionnaire included is the Relationship Questionnaire (RQ) (Bartholomew & Horowitz, 1991), designed to measure adult attachment style. Following this, the Eysenck Personality Questionnaire short scale version (EPQR-S) (Eysenck & Eysenck, 1985), included to measure participants personality traits. The third questionnaire is the Group Environment Questionnaire (GEQ) (Carron, Widmeyer & Brawley, 1985), which directly measures group cohesiveness. The final questionnaire is the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999),
which measures participant happiness. In compliance with the ethical code of conduct of the Psychological Society of Ireland (PSI), the questionnaire booklet included a cover sheet detailing terms of anonymity, confidentiality and information relating to withdrawal from the study. In addition to this, contact information of relevant support services was included for those who may have found the questionnaire distressing. When all questionnaires were collected, the data was entered into a statistical package for social sciences (SPSS Version 18) for analysis, which required access to a computer.

2.3.1 Relationship Questionnaire (RQ)

The Relationship Questionnaire (Bartholomew & Horowitz, 1991), is a self-report questionnaire designed to obtain continuous ratings of four prototypical attachment styles applied to adult peer relationships. This questionnaire, developed from the framework of the original three category measure of attachment (Hazan & Shaver, 1987) is based upon Bowlby's (1969) initial model of self and others, and Ainsworth's (1978) classification of distinct attachment styles.

The RQ is comprised of four short paragraphs, each describing a prototypical, distinct style of attachment, namely the secure, preoccupied, fearful and dismissive styles. The individual in the secure attachment prototype has generally positive views of themselves, their partners and their relationships. These individuals report higher satisfaction with relationships and tend to be more comfortable with intimacy and independence in equal measures than those with different attachment styles. The descriptive paragraph that these individuals tend to agree with is Q1 A of the RQ - "It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me." Individuals that mostly agree with Q1 B of the RQ - "I am uncomfortable getting close to others. I want emotionally close
relationships, but I find it difficult to trust others, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.", are defined as having a fearful attachment prototype. This style is exemplified by conflicting feelings towards close relationships. They desire close emotional relationships, but at the same time may feel uncomfortable with these close relationships. They display low levels of trust towards partners in addition to negative views of themselves and their partners. Those with a preoccupied attachment prototype, agreeing with the descriptive paragraph Q1 C of the RQ - "I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.", are observed to have high needs in relationships and have less positive views of themselves compared to securely attached individuals. Those with dismissive prototypical style of attachment require high levels of independence, demonstrating no particular need for intimacy with others, often having negative views of others compared to themselves. These individuals tend to agree with Q1 D of the RQ - "I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient. I prefer not to depend on others or have others depend on me."

In question one of the RQ, participants are asked to select the paragraph that "best describes you or is closest to the way you generally are in your close relationships". In question 2 of the RQ, using a seven point likert scale, each participants is then asked to rate each of the descriptive paragraphs as to the "extent to which you think each description corresponds to your general relationship style". This results in a profile of the individuals attachment feelings through four separate attachment scores. The prototype that results in the highest score on the likert scale is used to classify the participant into the corresponding
attachment prototype. If two or more attachment prototypes score the same, the prototype that the participant chooses as best fitting as per question one is reverted to.

A strong discriminant validity for this questionnaire has been found (Griffin & Bartholomew, 1994), in addition to cross cultural norms (Schmitt et al., 2004). Scharfe & Bartholomew (1994) found moderate stability over an 8 month period when retested, while acceptable levels of validity, reliability and stability were found by Sumer & Gungor (1999).

2.3.2 Eysenck Personality Questionnaire (EPQ)

The Eysenck Personality Questionnaire (EPQ) is a self report questionnaire designed to measure three personality traits, Extroversion, Psychoticism, Neuroticism, in addition to a lie scale developed from Eysenck's (1958) initial dual trait personality questionnaire, Psychoticism was a later addition to the original traits of extroversion and neuroticism (Eysenck & Eysenck, 1976). Due to practical disadvantages resulting from the length of this questionnaire, a shorter version was designed cutting the number of questions from 100 items to only 48 items. This shortened version of the EPQ, named the Eysenck Personality Questionnaire Revised - Short Form (EPQR-S; Eysenck et al., 1985) was administered to participants in this study.

The EPQR-S contains 48 items measuring 3 personality traits and one lie scale, which acts as a control scale for testing social desirability bias. Each trait is measured by 12 items on the questionnaire, with each participant answering yes or no to each specific item, with items scoring either a 1 or 0 as per the scoring sheet (Appendix B). The resulting scores for each subscale therefore range from 1 to 12, with 12 being the highest score possible for each subscale.
Those scoring high in extroversion are defined as being socially outgoing, energetic and lively, preferring social situations to those of loneliness (Ryckman, 2008). In opposition to this, those scoring low in this subscale are considered to be introverted, displaying less comfort in social situations, directing more focus on themselves than others. An example of one of the 12 items measuring this subscale is question 3 of the EPQR-S, "Are you a talkative person?". The second subscale measured by the EPQR-S is Neuroticism. High scoring on this subscale is an indicator of emotional instability, with those scoring highly having increased levels of nervousness, anxiety and insecurity (Ryckman, 2008). Conversely, those scoring low on this scale display are considered to have higher levels of emotional stability. Question 38 of the EPQR-S is one of the 12 items measuring neuroticism, asking "Do you suffer from 'nerves'?". Psychoticism is the final trait measured in the EPQR-S, highlighting personality characteristics that may be considered somewhat abnormal or anti-social, such as aggressiveness, a lack of empathy and insensitivity (Ryckman, 2008). A typical item measuring Psychoticism in the EPQR-S is question 39, "Would you like other people to be afraid of you?". As discussed, the final subscale, the lie scale, is used as a control for social desirability bias. This subscale was not used in the current study.

High reliabilities have been reported for the EPQR-S (Eysenck et al., 1985), along with adequate cross cultural performance (Francis et al., 1992). This scale has been used widely in research implying strong validity for the questionnaire (Aleixo & Norris, 2000; Creed et al., 2001; Francis & Wilcox, 1998; Halamandaris & Power, 1999; Linton & Wiener, 2001; Robbins et al., 1997)

2.3.3 Group Environment Questionnaire

The Group Environment Questionnaire (GEQ) is a self-report questionnaire designed to measure cohesion within a group. Developed from the view of cohesion as a
multidimensional construct (Carron et al., 1985), it measures cohesion across four separate subscales, Individual Attractions to the Group - Social (ATGS), Individual Attractions to the Group - Task (ATGT), Group Integration - Social (GIS), and finally, Group Integration - Task (GIT). As proposed by Carron et al. (1985), ATGS is considered the extent to which the individual is attraction to the group on a social level, with ATGT being a measure of the individual's attraction to the group to achieve particular goals. On the group level, GIS is a measure of the individual's perception of how the group functions socially, while GIT is a measure of how the group function in the pursuit of certain goals.

Participants are required to score 18 items on a 9 point likert scale ranging from 1 (strongly disagree) to 9 (strongly agree), with the first 9 items relating to their personal involvement with the team, and the second 9 items relating to the participants perception of the team as a whole. Examples of specific items relating to each individual subscale include question 5, "Some of my best friends are on this team" (ATGS), question 8, "I do not like the style of play on this team" (ATGT; reverse coded), question 15, "Our team would like to spend time together in the off season" (GIS), and question 10, "Our team is united in trying to reach its goals for performance" (GIT).

Widemayer et al. (1985) offered support for a four factor model for the GEQ using exploratory factor analysis reliability for the GEQ, in addition to high factorial and convergent validity using confirmatory factor analysis (Li & Harmer, 1996).

2.3.4 Subjective Happiness Scale

The Subjective Happiness Scale (Lyubomirsky, 2002) is a self-report questionnaire designed to measure an individual's subjective level of happiness. It is a four item scale with two items asking the participant to assess themselves primarily, followed by an assessment relative to their peers. Another two items offer descriptions of happy and unhappy individuals
respectively, asking the participant the extent to which the description describes themselves.

Each item uses a 7 point likert scale, with item 1 using a scale ranging from 1 (Not a very happy person) to 7 (A very happy person), item 2 using the scale 1 (Less happy) to 7 (More happy), and item 3 and 4 using a scale ranging from 1 (Not at all) to 7 (A great deal). The number scores for each question are averaged, resulting in a single final number score, with the highest possible score being 7. The SHS was developed and validated over 14 studies using a total of 2,732 participants, with results indicating a high internal consistency across samples. In addition, test and re-test suggest good reliability and high construct validity. Over the 14 studies the Crohbach Alpha's ranged from 0.79-0.94 (Lyubomirsky, 2002).

2.4 Procedure

The questionnaire booklet, consisting of the afore mentioned questionnaires and cover sheer, was piloted on 3 participants to ascertain any procedural issues and to establish the length of time required to complete it, in addition to gathering feedback on the participants ability to understand and complete the questionnaire. After the questionnaire had been finalised, verbal contact was made to a number of coaches of amateur sports teams around the country, with a focus mainly on the north Wicklow area of Ireland. With permission to administer this questionnaire granted by a number of coaches, they were administered to participants before training sessions in some cases, and after training sessions in other cases. Prior to participants completing the questionnaires, instructions were read out to the group, in addition to relevant information regarding anonymity, confidentiality and the voluntary nature of participation in this study. Their right to withdraw at any time prior to collection of the questionnaires was also stressed. Contact details for support services were listed on the cover letter in the eventuality that any participant required support for any difficult feelings raised by the questionnaire. Participants were informed that the nature of the study was an exploration of group dynamics within amateur sports teams. Participants were then asked to
read the cover letter prior to filling out the questionnaire, and to only continue if they were happy to do so. Each questionnaire took approximately 10-15 minutes to complete, with each participant returning them on completion. Thanks were related to each participant, and to each coach for giving permission for their team to be part of this study. After all questionnaires were collected, a data-set was created in SPSS, where it was statistically analysed. Means and standard deviations were used to collect descriptive statistics for demographic variables. To examine relationships between variables, inferential statistical tests such as independent t-tests, one-way anovas, Pearson's correlations and linear regressions.
3. Results

3.1 Demographic variables

All data collected for this research was coded and analysed using SPSS version 18. The following bar charts illustrate the demographic variables for gender of participants (Figure 1) and age range of participants (Figure 2).

The descriptive statistics show that 76.5% of participants were male (n=52), while 23.5% were female (n=16).

![Figure 1 - Gender of Participants](image1)

The descriptive statistics for age grouping of participants show that 20.6% of participants are in the age category of 18-24 (n=14), with 48.5% falling into the age category of 25-31 (n=33), and finally 30.9% of participants falling into the 32+ age category (n=21).

![Figure 2 - Age Category of Participants](image2)
3.2 Criterion variable - Team Cohesiveness

An independent samples t-test was carried out to obtain the means and standard deviations for team cohesiveness across the four subscales of Individual Attractions to the Group - Social (ATGS), Individual Attractions to the Group - Task (ATGT), Group Integration - Social (GIS), and Group Integration - Task (GIT) and gender. These are illustrated in Table 1 below. Regarding ATGS, males have a mean of 5.27(SD=1.79) and females have a mean of 5.94(SD=1.58). For ATGT, males have a mean of 5.77(SD=1.21), while females have a mean of 6.28(SD=1.59). For GIS, males have a mean of 4.82(SD=1.31) as compared to females who have a mean of 5.44(1.68). Finally, for GIT, males have a mean of 5.35(SD=0.77) with females showing a mean of 5.49(SD=1.00).

Table 1 - Team Cohesiveness and Gender

<table>
<thead>
<tr>
<th>Team Cohesiveness Subscale</th>
<th>Gender of participant</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attractions to Group - Social (ATGS)</td>
<td>M</td>
<td>5.27</td>
<td>1.79</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.94</td>
<td>1.58</td>
</tr>
<tr>
<td>Individual Attractions to Group - Task (ATGT)</td>
<td>M</td>
<td>5.77</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>6.28</td>
<td>1.59</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>M</td>
<td>4.82</td>
<td>1.31</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.44</td>
<td>1.68</td>
</tr>
<tr>
<td>Group Integration - Task (GIT)</td>
<td>M</td>
<td>5.35</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.49</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To obtain the means and standard deviation for team cohesiveness across the four subscales and age, a one-way Anova was carried out. The results are detailed in Table 2 below. In the subscale ATGS, the means and standard deviations each show that 18-24 year
olds have a mean of 5.26(SD=1.73), 25-31 year olds have a mean of 5.36(SD=1.19) and those over 32 years of age have a mean of 5.64(SD=1.45). The total mean score for ATGS is 5.42(SD=1.38). In the subscale ATGT, the means and standard deviations reveal that 18-24 year olds have a mean of 6.05(SD=1.39), 25-31 year olds have a mean of 5.80(SD=1.42) and those over 32 years of age have a mean of 5.94(SD=1.13). The total mean score for ATGT is 5.89(SD=1.32). In the third subscale GIS, the means and standard deviations each show that 18-24 year olds have a mean of 4.95(SD=1.19), 25-31 year olds have a mean of 4.86(SD=1.55) and those over 32 years of age have a mean of 5.15(SD=1.37). The total mean score for GIS is 4.97(SD=1.41). In the final subscale, GIT, the means and standard deviations show that 18-24 year olds have a mean of 5.51(SD=0.58), 25-31 year olds have a mean of 5.34(SD=0.82) and those over 32 years of age have a mean of 5.35(SD=0.97). The total mean score for GIT is 5.38(SD=0.82).

Table 2 - Team Cohesiveness and Age

<table>
<thead>
<tr>
<th>Team Cohesiveness Subscale</th>
<th>Age of participant</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attraction to Group - Social (ATGS)</td>
<td>18-24</td>
<td>5.26</td>
<td>1.73</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>5.36</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>5.64</td>
<td>1.45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.42</td>
<td>1.38</td>
</tr>
<tr>
<td>Individual Attraction to Group - Task (ATGT)</td>
<td>18-24</td>
<td>6.05</td>
<td>1.39</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>5.80</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>5.94</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.89</td>
<td>1.32</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>18-24</td>
<td>4.95</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>4.86</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>5.15</td>
<td>1.37</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.97</td>
<td>1.41</td>
</tr>
<tr>
<td>Group Integration - Task (GIT)</td>
<td>18-24</td>
<td>5.51</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>5.34</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>5.35</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.38</td>
<td>0.82</td>
</tr>
</tbody>
</table>
3.3 Predictor variables

3.3.1 Adult Attachment Type

Figure 3 shows the percentages of each adult attachment type within each gender, with 49% of males (N=25) and 73.3% of females (N=11) having a secure attachment type, 17.6% of males (N=9) and 13.3% of females (N=2) having a fearful attachment type. The preoccupied attachment type reflects the lowest percentages across genders, with 7.8% of males (N=4) and no females having this attachment type. Finally, the dismissing attachment type showed percentages of 25.5% for males (N=13) and 13.3% for females (N=2).

Figure 3 - Attachment Styles and Gender

Figure 4 displays the variance of attachment types across the three age groups, with the secure attachment type having the highest results across all three age groups, 50% of 18-24 year olds (N=7), 50% of 25-31 year olds (N=16) and 65% of those aged 32 and over (N=13). Within the fearful attachment type, there were 28.6% of 18-24 year olds (N=4), 12.5% of 25-31 year olds (N=4) and 27.3% of those 32 years of age and over (N=3). The preoccupied attachment type had 7.1% of 18-24 year olds (N=1), 3.1% of 25.31 year olds (N=1) and 10% of those aged 32 and over (N=2). Finally, 14.3% of 18-24 year olds (N=2),
34.4% of 25-31 year olds (N=11) and 10% of those aged 32 and over (N=2) were classified into a dismissing attachment style.

Figure 4 - Attachment Styles and Age Groups

3.3.2 Personality Style

An independent samples t-test and one-way Anova were run to establish personality style as it relates to gender and age respectively. As illustrated in Table 3, the male mean for Psychoticism is 5.04(SD=2.23), for Extroversion is 6.62(SD=2.76), and for Neuroticism is 5.71(SD=2.50). These results compare to the female means for Psychoticism of 3.19(SD=1.6), Extraversion of 9.19(SD=3.19) and Neuroticism of 5.00(SD=3.25).

Table 3 - Personality Style and Gender

<table>
<thead>
<tr>
<th>Personality Style</th>
<th>Gender of participant</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoticism Score</td>
<td>M</td>
<td>5.04</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>3.19</td>
<td>1.60</td>
</tr>
<tr>
<td>Extroversion Score</td>
<td>M</td>
<td>6.62</td>
<td>2.76</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>9.19</td>
<td>3.19</td>
</tr>
<tr>
<td>Neuroticism Score</td>
<td>M</td>
<td>5.71</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.00</td>
<td>3.25</td>
</tr>
</tbody>
</table>
Differences in personality style scores can also be displayed through the three different age categories, as illustrated in Table 4. Participants aged 18-24 came in with a mean Psychoticism score of 5.07(SD=2.06), a mean Extroversion score of 7.29(SD=3.07) and a mean Neuroticism score of 5.36(SD=2.31). Those aged 25-31 had a mean Psychoticism score of 4.55(SD=2.86), a mean Extroversion score of 7.21(SD=3.30) and a mean Neuroticism score of 5.27(SD=2.95). Those aged 32 and over reported a mean Psychoticism score of 4.38(SD=2.33), a mean Extroversion score of 7.19(SD=2.73) and a mean Neuroticism score of 6.10(SD=2.53). The total mean score for all age groups in Psychoticism was 4.60(SD=2.23), while Extroversion was 7.22(SD=3.05), and Neuroticism had a mean score of 5.54(SD=2.69).

Table 4 - Personality Style and Age

<table>
<thead>
<tr>
<th>Personality Style</th>
<th>Age of participant</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoticism Score</td>
<td>18-24</td>
<td>5.07</td>
<td>2.06</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>4.55</td>
<td>2.28</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>4.38</td>
<td>2.33</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.60</td>
<td>2.23</td>
</tr>
<tr>
<td>Extroversion Score</td>
<td>18-24</td>
<td>7.29</td>
<td>3.07</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>7.21</td>
<td>3.30</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>7.19</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7.22</td>
<td>3.05</td>
</tr>
<tr>
<td>Neuroticism Score</td>
<td>18-24</td>
<td>5.36</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>25-31</td>
<td>5.27</td>
<td>2.95</td>
</tr>
<tr>
<td></td>
<td>32+</td>
<td>6.10</td>
<td>2.53</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.54</td>
<td>2.69</td>
</tr>
</tbody>
</table>

3.3.3 Predictor variable - Happiness

An independent samples t-test was run to gather data regarding happiness scores and gender differences. Male participants had a mean happiness score of 4.98(SD=1.05) while female participants had a mean happiness score of 5.34(SD=0.889). Age differences were
assessed using a one-way Anova, with 18-24 year olds having a mean happiness score of 5.30(SD=1.08), 25-31 year olds with a mean of 4.96(SD=1.09) and 32 and over having a mean score of 5.1(SD=0.84). The total mean happiness score was 5.07(SD=1.02).

3.4 Inferential Statistics on Hypotheses

3.4.1 Hypothesis 1 - Participants with secure adult attachment types will demonstrate above average perceptions of group cohesiveness.

As illustrated in Table 5, a one-way analysis of variance showed that there was no significant difference between attachment types and measures of group cohesiveness, ATGS - \((F(3, 62) = 0.11, \ p > .001)\), ATGT - \((F(3, 62) = 0.55, \ p > .001)\), GIS - \((F(3, 62) = 1.77, \ p > .001)\), GIT - \((F(3, 61) = 0.46, \ p > .001)\).

<table>
<thead>
<tr>
<th>Team Cohesiveness Subscale</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attraction to Group - Social (ATGS)</td>
<td>Between Groups</td>
<td>3</td>
<td>0.11</td>
</tr>
<tr>
<td>Individual Attraction to Group - Task (ATGT)</td>
<td>Between Groups</td>
<td>3</td>
<td>0.55</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>Between Groups</td>
<td>3</td>
<td>1.77</td>
</tr>
<tr>
<td>Group Integration - Task (GIT)</td>
<td>Between Groups</td>
<td>3</td>
<td>0.46</td>
</tr>
</tbody>
</table>

3.4.2 Hypothesis 2 - Participants scoring high on neuroticism will demonstrate lower than average perceptions of team cohesiveness.

The mean scores for Neuroticism was 5.54(SD=2.69), while the total mean scores for ATGS was 5.42(SD=1.38), for ATGT was 5.89(SD=1.32), for GIS was 4.97(SD=1.41), and for GIT was 5.38(SD=0.82). A pearson correlation coefficient found that there was a no significant
relationship between Neuroticism and ATGS ($r_{(68)} = 0.13$, $p > .01$), no significant relationship between Neuroticism and ATGT ($r_{(68)} = -0.07$, $p > .01$), no significant relationship between Neuroticism and GIT ($r_{(68)} = 0.19$, $p > .01$), although a moderate negative significant relationship was found between Neuroticism and GIS ($r_{(68)} = 0.361$, $p < .01$).

Linear regression was conducted to determine the effect of Neuroticism on GIS. It was found that Neuroticism significantly predicted GIS ($F(2,65) = 9.44$, $p < .001$, $R^2 = .22$) (Neuroticism, beta = -.38, $p < .001$).

3.4.3 Hypothesis 3 - There will be gender differences within perceptions of team cohesiveness

An independent samples t-test found that there was no statistically significant difference between gender and perceptions of group cohesiveness, ATGS ($t_{(66)} = -1.73$, $p = .089$), ATGT ($t_{(66)} = -1.36$, $p > 0.05$), GIS ($t_{(66)} = -1.53$, $p = p > 0.05$), GIT ($t_{(65)} = -0.61$, $p > 0.05$). However, as illustrated in Table 6, there are indications of an approach towards significance between genders within the subscales of ATGS (male mean of 5.27, SD=1.79, female mean of 5.94, SD=1.58), ATGT (male mean of 5.77, SD=1.21, female mean of 6.28, SD=1.59), and GIS, male mean of 4.82, SD=1.31, female mean of 5.44, SD=1.68).

Table 6 - Gender differences in team cohesion

<table>
<thead>
<tr>
<th>Team Cohesiveness Subscale</th>
<th>Gender</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attractions to Group - Social (ATGS)</td>
<td>M</td>
<td>5.27</td>
<td>1.79</td>
<td>-1.73</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.94</td>
<td>1.58</td>
<td>-</td>
</tr>
<tr>
<td>Individual Attractions to Group - Task (ATGT)</td>
<td>M</td>
<td>5.77</td>
<td>1.21</td>
<td>-1.36</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>6.28</td>
<td>1.59</td>
<td>-</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>M</td>
<td>4.82</td>
<td>1.31</td>
<td>-1.53</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>5.44</td>
<td>1.68</td>
<td>-</td>
</tr>
</tbody>
</table>
3.4.4 Hypothesis 4 - There will be age differences in perceptions of team cohesiveness

A Pearson correlation coefficient found that there was no significant relationship between age and ATGS (r (68) = 0.103, p > .01), ATGT (r (68) = -0.020, p > .01), GIS (r (68) = 0.062, p > .01), or GIT (r (67) = 0.063, p > .01), shown in Table 7 below.

Table 7 - Age and team cohesiveness

<table>
<thead>
<tr>
<th>Team Cohesion Subscale</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attractions to Group - Social (ATGS)</td>
<td>.103</td>
<td>.40</td>
</tr>
<tr>
<td>Individual Attractions to Group - Task (ATGT)</td>
<td>-.020</td>
<td>.88</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>.062</td>
<td>.61</td>
</tr>
<tr>
<td>Group Integration - Task (GIT)</td>
<td>-.063</td>
<td>.107</td>
</tr>
</tbody>
</table>

3.5 Results of other significance

During analysis of the data, a number of results of significance separate to the original hypotheses were noted.

3.5.1 Psychoticism and team cohesiveness

A Pearson correlation coefficient found that there was a strong negative significant relationship between Psychoticism and ATGS (r (68) = -.52, p < .01), a weak negative significant relationship between Psychoticism and ATGT (r (68) = -.24, p < .01), a weak negative significant relationship between Psychoticism and GIS (r (68) = -.28, p < .05). These results are illustrated in Table 8.
### Table 8 - Psychoticism and Team Cohesiveness

<table>
<thead>
<tr>
<th>Team Cohesiveness Subscale</th>
<th>Psychoticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attractions to Group</td>
<td></td>
</tr>
<tr>
<td>- Social (ATGS)</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Individual Attractions to Group</td>
<td></td>
</tr>
<tr>
<td>- Task (ATGT)</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Group Integration - Social (GIS)</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

Linear regression was conducted to determine the effect of Psychoticism on ATGS, ATGT and GIS. It was found that Psychoticism significantly predicted GIS ($F(2,65) = 9.44, p < .001, R^2 = .22$) (Psychoticism, beta = -.309, p < .001), significantly predicted ATGS ($F(1,66) = 24.91, p < .001, R^2 = .27$) (Psychoticism, beta = -.523, p < .001), and significantly predicted ATGT ($F(1,66) = 4.15, p < .001, R^2 = .06$) (Psychoticism, beta = -.24, p < .001).

#### 3.5.2 Personality and Happiness

A Pearson correlation coefficient found that there was a moderate negative significant relationship between Psychoticism and Extraversion ($r (68) = -.31, p < .01$), a moderate positive significant relationship between Extroversion and Happiness ($r (67) = .41, p < .01$) and a moderate negative significant relationship between Neuroticism and Happiness ($r (67) = -.31, p < .05$).

Table 9 illustrates the results of linear regressions that were also conducted to determine these effects. It was found that Neuroticism and Extroversion significantly predicted Happiness ($F(2,64) = 9.50, p < .001, R^2 = .23$) (Neuroticism, beta = .37, p < .001,
Extraversion, beta = -.25, p < .001), and that Psychoticism significantly predicted Extraversion ($F(1,66) = 7.01, p < .001, R^2 = .10$) (Psychoticism, beta = -.31, p < .001).

*Table 9 - Linear regressions for Personality and Happiness*

<table>
<thead>
<tr>
<th>Personality Style</th>
<th>Extraversion</th>
<th>Happiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoticism</td>
<td>R Square .10</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>F Change 7.01</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Beta -.31</td>
<td>-</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>R Square</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>F Change 9.50</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>-</td>
</tr>
<tr>
<td>Extraversion</td>
<td>R Square</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>F Change 9.5</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>-</td>
</tr>
</tbody>
</table>
4. Discussion

The purpose of this study was to investigate the relationships between group cohesion and the constructs of personality style, attachment type and happiness. The sample size of the study was 68 participants (N=68). This sample consisted of 52 males (N=52, 76.5%) and sixteen females (N=16, 23.5%), with ages ranging from 18-24 (N=14, 20.6%), 25-31 (N=33, 48.5%) and 32+ (N=21, 30.9%). These participants were asked to complete a pen and paper questionnaire made up of questions relation to demographics such as age and gender, in addition to four additional published questionnaires, the Relationship Questionnaire (RQ), the Eysenck Personality Questionnaire short scale version (EPQR-S), the Group Environment Questionnaire (GEQ) and the Subjective Happiness Scale (SHS). Statistical analysis such as independent t-tests, one-way anovas, Pearson's correlations and linear regressions were used to analyse the data collected from the sample.

The first hypothesis stated that participants with secure adult attachment types, a predictor variable, will demonstrate above average perceptions of group cohesiveness, the criterion variable. The results showed that there was no significant difference between the four attachment types of secure, fearful, preoccupied and dismissive on the four subscales of group cohesiveness (ATGS, ATGT, GIS, GIT), although a one-way anova did show that those with secure attachment types had higher mean scores in ATGS than other attachment means. Smith et al. (1999) found that individuals with anxious or avoidant attachments towards the group reporting lower perceptions of support from the group, in addition to increased reports of negative feelings towards the group. Supporting Smith et al.'s work, Harel et al. (2007) noted correlations between high attachment anxiety and perceptions of conflict within the group. It would follow that adults with avoidant attachments may have reported these feelings due to their high independence levels and low requirements for intimacy. These characteristics may result in the individual actively separating themselves
from the group, therefore creating an environment where support from other group members is not as forthcoming as it would be if the group was embraced by the individual. Conversely, it could be argued that those with attachment types that are inherently more open to social integration, such as a secure attachment type, would report higher levels of satisfaction with group processes, such as group cohesion. Lopez et al. (2002) found that individuals with secure attachments found it easier to transition into college life than those with insecure attachments. This is argued to be due to increased sociability and self-belief in those with secure attachments, with insecure types having difficulties in socialising with new groups.

The results of this study do not support the assertion that secure attachment types lead to greater perceptions of group cohesiveness, although the mean scores for ATGS (attraction to group - social) suggest that secure types appear to more attracted to social dimensions of the group than other attachment types. Another interesting difference in the mean scores were differences in GIS (group integration - social). Although not significant, there was a difference between secure type scores for this subscale, and preoccupied or dismissing type scores, suggesting that a larger sample of participants may provide some results of significance.

The second hypothesis proposed that participants scoring high on neuroticism will demonstrate lower than average perceptions of teamwork cohesiveness. The results obtained showed that out of the four subscales of group cohesion, only GIS displayed a significant relationship to neuroticism. This relationship was moderate and negative, suggesting that increased levels of emotional instability, insecurity or anxiety result in more difficulties with social integration. These results concur with those of Barrick et al. (1998) and Van Vianen & De Dreu (2001) who found lower levels of neuroticism to be predictors of increased higher levels of group cohesiveness.
The third hypothesis devised was that there will be gender differences within perceptions of team cohesiveness. Using an independent samples t-test, it was found that there was no statistically significant difference between gender and perceptions of group cohesiveness. This does appear to be at odds with findings of Chopik et al. (2013), who noted higher attachment avoidance and anxiety as compared to men, which in turn may lead to lower perceptions of the group climate due to the characteristics associated with these attachment types. It was observed that females scored on average higher in all subscales of group cohesiveness. In a larger sample, this may display some significant results. From this study, the results may reflect the fact that a much larger percentage of females (73.3%) had secure attachment types, as compared to the male sample (49%), in addition to a higher male percentage having dismissing attachment types (25.5%) as compared to females (13.3%). As we discussed previously, these attachment types and their accompanying characteristics may have an effect on in-group perceptions.

Finally, it was hypothesised that there will be age differences in perceptions of team cohesiveness. Again, there was no significant relationship noted between age and team cohesiveness. Chopik et al. (2013) found that attachment anxiety followed a downward trend from late adolescence to middle-aged and older adults, which one could contend would lead to higher perceptions of poor group function in younger participants due to difficulties in group interactions.

Despite these results, a number of other results of significance were found when analysing the data. Primarily, significant relationships were found between the personality type of Psychoticism. The results showed a negative relationship between Psychoticism and ATGT, ATGS and GIS, that as scores of Psychoticism increased, attraction to the group on a task-level and on a social-level decreased, in addition to decreasing social integration with the group. The characteristics of those with high levels of Psychoticism include, aggressiveness,
insensitivity, and lack of empathy (Ryckman, 2008), characteristics that are definitely less conducive to positive group integration. It follows that those high in Psychoticism may distance themselves from task and social based activities, or indeed may be distanced by members of the group due to these unsociable behaviours.

In addition to this, a negative significant relationship between Psychoticism and Extraversion was found, highlighting supporting the previous conclusion that those high in psychoticism may withdraw from social interaction, therefore with a reduction in the characteristics of the extrovert. A positive significant relationships between Extroversion and Happiness and a moderate negative significant relationship between Neuroticism and Happiness, suggesting that extroverts are generally more happy, with increased emotional instability leading to lower levels of happiness. These findings are in line with the previous findings of Costa & McCrae (1980), who found a positive relationship between extraversion and happiness, and negative correlations between happiness and neuroticism.

A number of limitations and weaknesses must be acknowledged when throughout this study. Primarily, due to the correlational nature of the design, this study cannot apply causation to the variables related to group dynamics. A large number of other variables are considered to effect cohesion such as group size (Carron & Spink, 1995) and group success (Zaccaro & McCoy (1988), to name a few. The scope of this study did not allow for any evaluation of this large collection of variables. Another weakness relating to group success was the grouping of participants into one whole sample. Further studies may find greater success if team cohesion is measured against its average for each individual team, rather than grouping all data together as was done in this study. This may lead to a more accurate categorisation of group cohesion, as one team enjoying more success will invariable report higher levels of cohesion than those experiences little success (Zaccaro & McCoy (1988). The implementation of a longitudinal study in further research may also be beneficial in gathering
a steady, consistent measure of group cohesion. Future research in this field will also benefit from a larger sample size, therefore allowing for results to be potentially generalised to the population as a whole. The small sample size in this study does not allow for this generalisation.

The limitations of self-report questionnaires must also be considered, with participants in some situations not wishing to report results that may represent 'weakness' or things that may be indicative of perceived personal failure. In addition to this, social desirability tendencies of participants must be considered, with some participants giving knowingly or unknowingly giving responses based on this.

Finally, although the questionnaires used are well established and have been used in numerous studies previously, showing good reliabilities, it must be noted that in this study the Cronbach’s alpha reliability coefficient were low in all but the Subjective Happiness Scale.

In conclusion, this study set out to investigate the effect that personality type and attachment style have on group cohesion within amateur sports teams. Personality type was measured by the Eysenck Personality Questionnaire Revised - Short Form (EPQR-S; Eysenck et al., 1985), attachment style by the Relationship Questionnaire (Bartholomew & Horowitz, 1991), and group cohesion by the Group Environment Questionnaire (Carron, Widmeyer and Brawley, 1985). These questionnaires were administered to 68 members of amateur sports teams in Ireland. It was found that there was no statistically significant relationship between attachment styles and the four subscales of group cohesiveness (ATGS, ATGT, GIS, GIT), some negative significant relationships between the personality type Psychoticism and ATGS, ATGT and GIS, and a positive significant relationship between the personality type Neuroticism and GIS. The study finds that personality type appears to be a better predictor of group cohesiveness within amateur sports teams.
References


Appendix 1

**Group dynamics within amateur sports teams**

My name is Patrick O’Farrell and I am conducting research in the Department of Psychology, Dublin Business School, that explores *group dynamics within amateur sports teams*. This research is being conducted as part of my studies and will be submitted for examination.

You are invited to take part in this study and participation involves completing and returning the attached anonymous questionnaires. While the survey asks some questions that might cause some minor negative feelings, it has been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included.

Participation is completely voluntary and so you are not obliged to take part.

Participation is anonymous and confidential. Thus responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw from participation after the questionnaire has been collected.

The questionnaires will be securely stored and data from the questionnaires will be transferred from the paper record to electronic format and stored on a password protected computer.

*It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study.*

Should you require any further information about the research, please contact Patrick O’Farrell, patrickjofarrell@gmail.com or 0857209854. My supervisor can be contacted at chris.gibbons@dbs.ie.

If any of the questions do raise difficult feelings for you, you may contact the following confidential emotional support services for anyone in Ireland experiencing feelings of distress or despair—

**Samaritans-Phone: 1850 609090, 24 hours a day**

**Aware-Phone: 1850 303302, 10am to 10pm Mon-Wed,**  
**10am to 1am Thurs-Sun**

Thank you for taking the time to complete this survey.
Gender: Male □ Female □

Age: 18-24 □ 25-31 □ 32+ □

1. Following are descriptions of four general relationship styles that people often report.

Please read each description and CIRCLE the letter corresponding to the style that best describes you or is closest to the way you generally are in your close relationships.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don’t worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

2. Please rate each of the following relationship styles according to the extent to which you think each description corresponds to your general relationship style.

Please select your rating on the following scale:

Not at all like me Somewhat like me Very much like me

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</table>
1. Does your mood often go up and down?  
2. Do you take much notice of what people think?  
3. Are you a talkative person?  
4. If you say you will do something, do you always keep your promise no matter how inconvenient it might be?  
5. Do you ever feel ‘just miserable’ for no reason?  
6. Would being in debt worry you?  
7. Are you rather lively?  
8. Were you ever greedy by helping yourself to more than your share of anything?  
9. Are you an irritable person?  
10. Would you take drugs which may have strange or dangerous effects?  
11. Do you enjoy meeting new people?  
12. Have you ever blamed someone for doing something you knew was really your fault?  
13. Are your feelings easily hurt?  
14. Do you prefer to go your own way rather than act by the rules?  
15. Can you usually let yourself go and enjoy yourself at a lively party?  
16. Are all your habits good and desirable ones?  
17. Do you often feel ‘fed-up’?  
18. Do good manners and cleanliness matter much to you?  
19. Do you usually take the initiative in making new friends?  
20. Have you ever taken anything (even a pin or button) that belonged to someone else?  
21. Would you call yourself a nervous person?  
22. Do you think marriage is old-fashioned and should be done away with?  
23. Can you easily get some life into a rather dull party?  
24. Have you ever broken or lost something belonging to someone else?  
25. Are you a worrier?  
26. Do you enjoy co-operating with others?  
27. Do you tend to keep in the background on social occasions?
28. Does it worry you if you know there are mistakes in your work?  
YES NO
29. Have you ever said anything bad or nasty about anyone?  
YES NO
30. Would you call yourself tense or 'highly-strung'?  
YES NO
31. Do you think people spend too much time safeguarding their future with savings and insurances?  
YES NO
32. Do you like mixing with people?  
YES NO
33. As a child were you ever cheeky to your parents?  
YES NO
34. Do you worry too long after an embarrassing experience?  
YES NO
35. Do you try not to be rude to people?  
YES NO
36. Do you like plenty of bustle and excitement around you?  
YES NO
37. Have you ever cheated at a game?  
YES NO
38. Do you suffer from ‘nerves’?  
YES NO
39. Would you like other people to be afraid of you?  
YES NO
40. Have you ever taken advantage of someone?  
YES NO
41. Are you mostly quiet when you are with other people?  
YES NO
42. Do you often feel lonely?  
YES NO
43. Is it better to follow society’s rules than go your own way?  
YES NO
44. Do other people think of you as being very lively?  
YES NO
45. Do you always practice what you preach?  
YES NO
46. Are you often troubled about feelings of guilt?  
YES NO
47. Do you sometimes put off until tomorrow what you ought to do today?  
YES NO
48. Can you get a party going?  
YES NO
The following questions are designed to assess your feelings about YOUR PERSONAL INVOLVEMENT with this team. Please CIRCLE a number from 1 to 9 to indicate your level of agreement with each of the statements.

1. I do not enjoy being a part of the social activities of this team.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

2. I am not happy with the amount of playing time I get.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

3. I am not going to miss the members of this team when the season ends.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

4. I am unhappy with my team’s level of desire to win.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

5. Some of my best friends are on this team.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

6. This team does not give me enough opportunities to improve my personal performance.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

7. I enjoy other parties more than team parties.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

8. I do not like the style of play on this team.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree

9. For me, this team is one of the most important social groups to which I belong.
   
   1  2  3  4  5  6  7  8  9
   
   Strongly Disagree  Strongly Agree
The following questions are designed to assess your perceptions of **YOUR TEAM AS A WHOLE**. Please CIRCLE a number from 1 to 9 that best indicates your level of agreement with each of the statements.

10. Our team is united in trying to reach its goals for performance.
   
   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

11. Members of our team would rather go out on their own than get together as a team.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

12. We all take responsibility for any loss or poor performance by our team.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

13. Our team members rarely party together.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

14. Our team members have conflicting aspirations for the team’s performance.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

15. Our team would like to spend time together in the off season.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

16. If members of our team have problems in training, everyone wants to help them so we can get back together again.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

17. Members of our team do not stick together outside of training and games.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**

18. Members of our team do not communicate freely about each athlete’s responsibilities during competition or training.

   1 2 3 4 5 6 7 8 9

   **Strongly Disagree**  **Strongly Agree**
For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:

   1  2  3  4  5  6  7
   Not a very happy person
   A very happy person

2. Compared to most of my peers, I consider myself:

   1  2  3  4  5  6  7
   Less happy
   More happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterisation describe you?

   1  2  3  4  5  6  7
   Not at all
   A great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

   1  2  3  4  5  6  7
   Not at all
   A great deal

Thank you for taking the time to complete this survey.